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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web  
NEWS 3 Jan 29 FSTA has been reloaded and moves to weekly updates  
NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency  
NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02  
NEWS 6 Mar 08 Gene Names now available in BIOSIS  
NEWS 7 Mar 22 TOXLIT no longer available  
NEWS 8 Mar 22 TRCTHERMO no longer available  
NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/CAplus and USPATFULL  
NEWS 10 Mar 28 LIPINSKI/CALC added for property searching in REGISTRY  
NEWS 11 Apr 02 PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.  
NEWS 12 Apr 08 "Ask CAS" for self-help around the clock  
NEWS 13 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area  
NEWS 14 Apr 09 ZDB will be removed from STN  
NEWS 15 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB  
NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS  
NEWS 17 Apr 22 BIOSIS Gene Names now available in TOXCENTER  
NEWS 18 Apr 22 Federal Research in Progress (FEDRIP) now available  
NEWS 19 Jun 03 New e-mail delivery for search results now available  
NEWS 20 Jun 10 MEDLINE Reload  
NEWS 21 Jun 10 PCTFULL has been reloaded  
  
NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
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NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
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\* \* \* \* \* \* \* \* \* STN Columbus \* \* \* \* \* \* \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:51:42 ON 28 JUN 2002

=> fil

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

	ENTRY	SESSION
FULL ESTIMATED COST	0.42	0.42

FILE 'HOME' ENTERED AT 08:52:34 ON 28 JUN 2002

=> fil reg COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.63

FILE 'REGISTRY' ENTERED AT 08:52:41 ON 28 JUN 2002  
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STRUCTURE FILE UPDATES: 26 JUN 2002 HIGHEST RN 434281-39-7  
 DICTIONARY FILE UPDATES: 26 JUN 2002 HIGHEST RN 434281-39-7

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

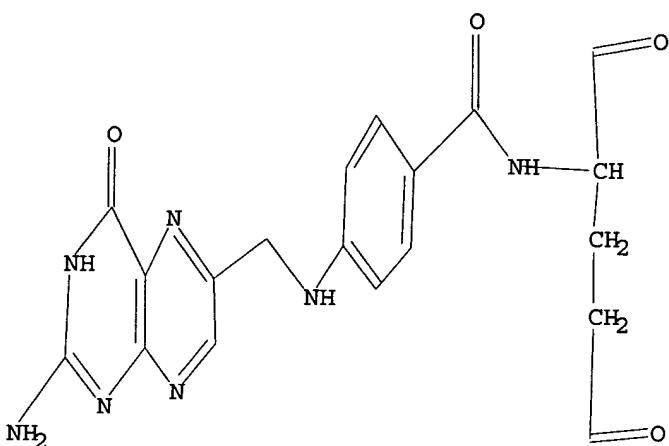
Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
 for more information. See STNote 27, Searching Properties in the CAS  
 Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>  
 Uploading 752867 (claim16a).str

L1 STRUCTURE UPLOADED

=> d  
 L1 HAS NO ANSWERS  
 L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11  
 SAMPLE SEARCH INITIATED 08:53:45 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 25 TO ITERATE

100.0% PROCESSED 25 ITERATIONS 13 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 200 TO 800  
 PROJECTED ANSWERS: 44 TO 476

L2 13 SEA SSS SAM L1

=> s 11 full  
 FULL SEARCH INITIATED 08:53:57 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 672 TO ITERATE

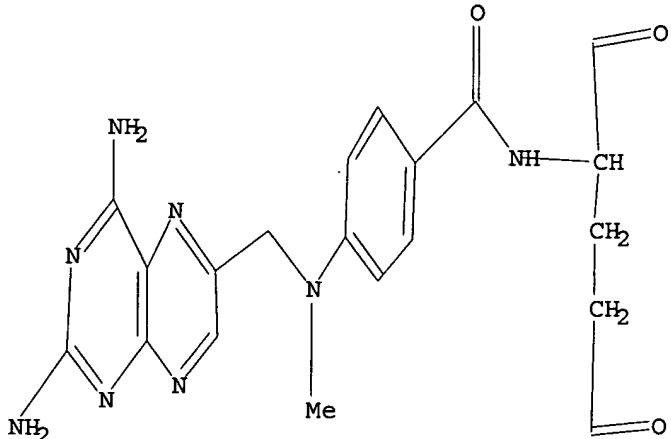
100.0% PROCESSED 672 ITERATIONS 337 ANSWERS  
 SEARCH TIME: 00.00.01

L3 337 SEA SSS FUL L1

=>  
 Uploading 752867 (claim 16b).str

L4 STRUCTURE UPLOADED

=> d  
 L4 HAS NO ANSWERS  
 L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 14  
 SAMPLE SEARCH INITIATED 08:55:01 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 45 TO ITERATE

100.0% PROCESSED 45 ITERATIONS 30 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 498 TO 1302  
 PROJECTED ANSWERS: 272 TO 928

L5 30 SEA SSS SAM L4

=> s 14 full  
 FULL SEARCH INITIATED 08:55:08 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 1107 TO ITERATE

100.0% PROCESSED 1107 ITERATIONS  
 SEARCH TIME: 00.00.01

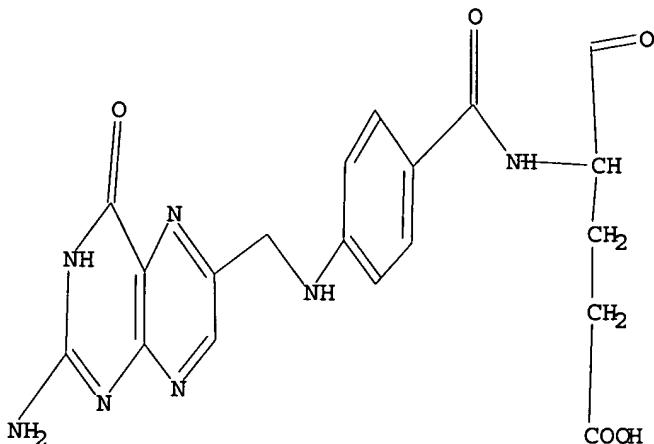
710 ANSWERS

L6 710 SEA SSS FUL L4

=>  
 Uploading 752867 (claim 36a).str

L7 STRUCTURE UPLOADED

=> d  
 L7 HAS NO ANSWERS  
 L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 17  
 SAMPLE SEARCH INITIATED 08:56:31 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 25 TO ITERATE

100.0% PROCESSED 25 ITERATIONS  
 SEARCH TIME: 00.00.01

11 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 200 TO 800  
 PROJECTED ANSWERS: 22 TO 418

L8 11 SEA SSS SAM L7

=> s 17 full  
 FULL SEARCH INITIATED 08:56:39 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 672 TO ITERATE

100.0% PROCESSED 672 ITERATIONS  
 SEARCH TIME: 00.00.01

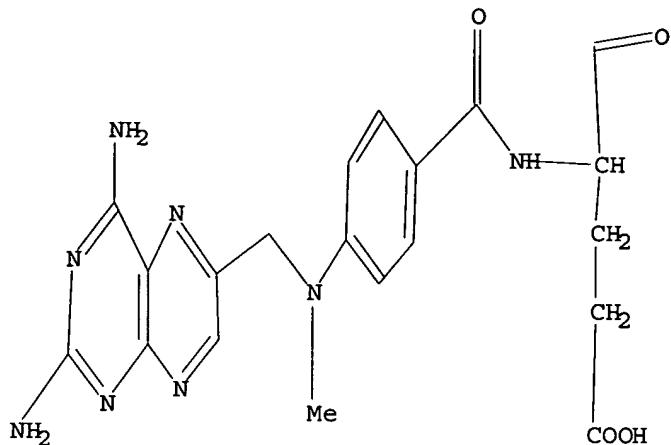
188 ANSWERS

L9 188 SEA SSS FUL L7

=>  
Uploading 752867 (claim 36b).str

L10 STRUCTURE UPLOADED

=> d  
L10 HAS NO ANSWERS  
L10 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l10  
SAMPLE SEARCH INITIATED 08:57:14 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 45 TO ITERATE

100.0% PROCESSED 45 ITERATIONS 9 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 498 TO 1302  
PROJECTED ANSWERS: 9 TO 360

L11 9 SEA SSS SAM L10

=> s l10 full  
FULL SEARCH INITIATED 08:57:20 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1107 TO ITERATE

100.0% PROCESSED 1107 ITERATIONS 301 ANSWERS  
SEARCH TIME: 00.00.01

L12 301 SEA SSS FUL L10

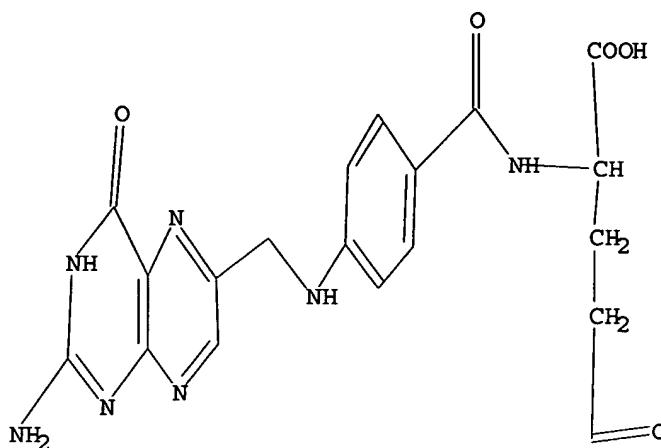
=>  
Uploading 752867 (claim 36c).str

L13 STRUCTURE UPLOADED

=> d  
L13 HAS NO ANSWERS

L13

STR



Structure attributes must be viewed using STN Express query preparation.

```
=> s l13
SAMPLE SEARCH INITIATED 08:58:05 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 25 TO ITERATE
```

```
100.0% PROCESSED 25 ITERATIONS 12 ANSWERS
SEARCH TIME: 00.00.01
```

```
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 200 TO 800
PROJECTED ANSWERS: 33 TO 447
```

L14 12 SEA SSS SAM L13

```
=> s l13 full
FULL SEARCH INITIATED 08:58:10 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 672 TO ITERATE
```

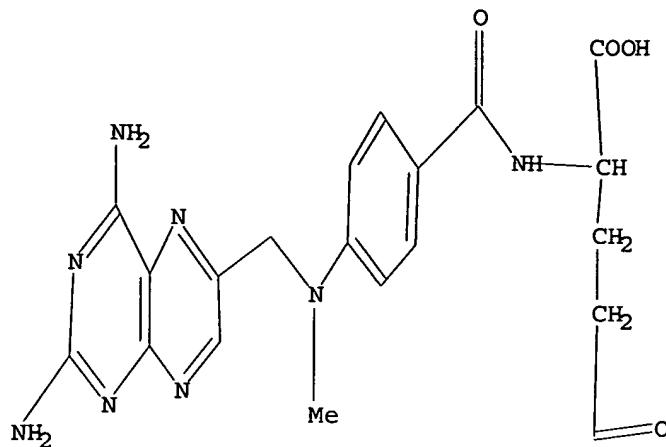
```
100.0% PROCESSED 672 ITERATIONS 270 ANSWERS
SEARCH TIME: 00.00.01
```

L15 270 SEA SSS FUL L13

```
=>
Uploading 752867 (claim 36d).str
```

L16 STRUCTURE UPLOADED

```
=> d
L16 HAS NO ANSWERS
L16 STR
```



Structure attributes must be viewed using STN Express query preparation.

```
=> s 116
SAMPLE SEARCH INITIATED 08:59:27 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 45 TO ITERATE
```

100.0% PROCESSED	45 ITERATIONS	15 ANSWERS
SEARCH TIME: 00.00.01		

FULL FILE PROJECTIONS:	ONLINE **COMPLETE**	
	BATCH **COMPLETE**	
PROJECTED ITERATIONS:	498 TO 1302	
PROJECTED ANSWERS:	68 TO 532	

L17 15 SEA SSS SAM L16

```
=> s 116 full
FULL SEARCH INITIATED 08:59:34 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1107 TO ITERATE
```

100.0% PROCESSED	1107 ITERATIONS	335 ANSWERS
SEARCH TIME: 00.00.01		

L18 335 SEA SSS FUL L16

=> fil .search		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
	843.96	844.59

FILE 'MEDLINE' ENTERED AT 08:59:46 ON 28 JUN 2002

FILE 'CAPLUS' ENTERED AT 08:59:46 ON 28 JUN 2002  
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=> d his

(FILE 'HOME' ENTERED AT 08:51:42 ON 28 JUN 2002)

FILE 'HOME' ENTERED AT 08:52:34 ON 28 JUN 2002

FILE 'REGISTRY' ENTERED AT 08:52:41 ON 28 JUN 2002

L1 STRUCTURE UPLOADED  
L2 13 S L1  
L3 337 S L1 FULL  
L4 STRUCTURE UPLOADED  
L5 30 S L4  
L6 710 S L4 FULL  
L7 STRUCTURE UPLOADED  
L8 11 S L7  
L9 188 S L7 FULL  
L10 STRUCTURE UPLOADED  
L11 9 S L10  
L12 301 S L10 FULL  
L13 STRUCTURE UPLOADED  
L14 12 S L13  
L15 270 S L13 FULL  
L16 STRUCTURE UPLOADED  
L17 15 S L16  
L18 335 S L16 FULL

FILE 'MEDLINE, CAPLUS, BIOSIS, USPATFULL, EMBASE' ENTERED AT 08:59:46 ON  
28 JUN 2002

=> s 13 or 16 or 19 or l12 or l15 or l18  
4 FILES SEARCHED...

L19 148184 L3 OR L6 OR L9 OR L12 OR L15 OR L18

=> s l19 and (ligand? or chelat?)  
L20 2030 L19 AND (LIGAND? OR CHELAT?)

=> s l20 and (metal or metals)  
L21 261 L20 AND (METAL OR METALS)

=> s l21 and (folate?)  
L22 72 L21 AND (FOLATE?)

=> dup rem l21  
PROCESSING COMPLETED FOR L21  
L23 245 DUP REM L21 (16 DUPLICATES REMOVED)

=> dup rem l22  
PROCESSING COMPLETED FOR L22  
L24 71 DUP REM L22 (1 DUPLICATE REMOVED)

=> d ibib ab hitstr 1-  
YOU HAVE REQUESTED DATA FROM 71 ANSWERS - CONTINUE? Y/(N) :y

## L24 ANSWER 1 OF 71 USPATFULL

ACCESSION NUMBER: 2002:99503 USPATFULL  
 TITLE: Compositions and methods for treating or preventing diseases of body passageways  
 INVENTOR(S): Hunter, William L., Vancouver, CANADA  
 MacLean, Lindsay S., Vancouver, CANADA

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2002052404 A1 20020502  
 APPLICATION INFO.: US 2001-933652 A1 20010520 (9)  
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-653207, filed on 24 May 1996, UNKNOWN  
 DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092  
 NUMBER OF CLAIMS: 14  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 94 Drawing Page(s)  
 LINE COUNT: 4786

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

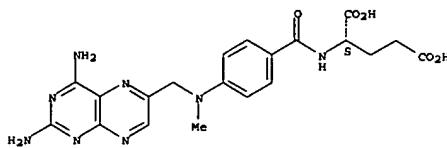
AB The present invention provides methods for treating or preventing diseases associated with body passageways, comprising the step of delivering to an external portion of the body passageway a therapeutic agent. Representative examples of therapeutic agents include anti-angiogenic factors, anti-proliferative agents, anti-inflammatory agents, and antibiotics.

IT 59-05-2, Methotrexate  
 (compsns. for treating or preventing diseases of body passageways)

RN 59-05-2 USPATFULL

CN L-Glutamic acid, N-[4-[(2,4-diamino-6-pteridinyl)methyl]amino]benzo(y)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



## L24 ANSWER 2 OF 71 USPATFULL (Continued)

## L24 ANSWER 2 OF 71 USPATFULL

ACCESSION NUMBER: 2002:99090 USPATFULL  
 TITLE: Method for the detection of an analyte by means of a nucleic acid reporter  
 INVENTOR(S): Baez, Luis, West Chester, PA, UNITED STATES  
 Ebersole, Richard C., Newark, DE, UNITED STATES  
 Hendrickson, Edwin R., Hockessin, DE, UNITED STATES  
 Neelkantan, Neel, Newark, DE, UNITED STATES  
 Perry, Michael P., Downingtown, PA, UNITED STATES

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2002051986 A1 20020502  
 APPLICATION INFO.: US 2001-858994 A1 20010516 (9)

NUMBER	DATE
--------	------

PRIORITY INFORMATION: US 2000-211293P 20000613 (60)

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: E I DU PONT DE NEMOURS AND COMPANY, LEGAL DEPARTMENT - PATENTS, 1007 MARKET STREET, WILMINGTON, DE, 19898

NUMBER OF CLAIMS:

25

EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

9 Drawing Page(s)

LINE COUNT:

2070

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process is disclosed for the detection of an analyte utilizing a nucleic acid label as a reporter. The analyte is detected by the binding

of at least two reporter conjugates, each conjugate comprising a member of a binding pair and a nucleic acid label. The binding of the reporter conjugates to the analyte facilitates the juxtaposition of the nucleic acid labels, forming a single nucleic acid amplicon. The amplicon may then be detected directly, or may be used as a template of the generation of amplification products. Detection of the analyte by this process significantly reduces assay background caused by non-specific reporter conjugate binding.

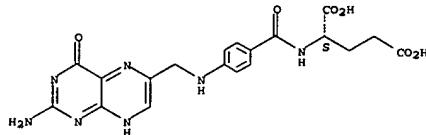
IT 59-30-3, Folic acid, uses

(method for detection of analyte by means of a nucleic acid reporter)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



## L24 ANSWER 3 OF 71 USPATFULL (Continued)

## L24 ANSWER 3 OF 71 USPATFULL

ACCESSION NUMBER: 2002:60709 USPATFULL  
 TITLE: Nutritional composition  
 INVENTOR(S): Kirschner, Mitchell I., St. Louis, MO, UNITED STATES  
 Levison, R. Saul, Chesterfield, MO, UNITED STATES  
 Paradissis, George N., St. Louis, MO, UNITED STATES  
 PATENT ASSIGNEE(S): DRUGTECH CORPORATION,

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2002034543 A1 20020321

APPLICATION INFO.: US 2001-949710 A1 20010912 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-451849, filed on 1 Dec

1999, PENDING

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Gary M. Nath, NATH & ASSOCIATES PLLC, 6th Floor, 1030 15th Street, Washington, DC, 20005

NUMBER OF CLAIMS:

120

EXEMPLARY CLAIM:

1

LINE COUNT:

1540

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present inventive subject matter is directed to novel chewable prenatal nutritional supplements which contain Vitamin C, as well as novel methods for providing optimal vitamin C supplementation to pregnant women. The present invention is also directed to novel compositions and methods for providing nutritional supplementation to individuals planning to conceive a child.

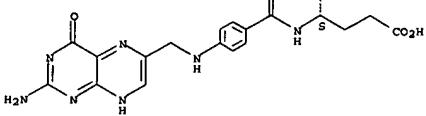
IT 59-30-3, Folic acid, biological studies

(nutritional compn. comprising Vitamin C)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 4 OF 71 USPATFULL  
 ACCESSION NUMBER: 2002:17336 USPATFULL  
 TITLE: Transdermal delivery system  
 INVENTOR(S): Dransfield, Charles William, Lake Cathie, AUSTRALIA

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2002022052	A1	20020221
APPLICATION INFO.: US 2001-863764	A1	20010524 (9)

NUMBER	DATE
-----	-----

PRIORITY INFORMATION: AU 2000-8885 20000721

AU 2000-6691 20000406

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Paul F. McQuade, GREENBERG TRAURIG, 12th FLOOR, 1750

TYSONS BLVD., MCLEAN, VA, 22102

NUMBER OF CLAIMS: 32

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Page(s)

LINE COUNT: 1341

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A transdermal or transepithelial composition and a method for making a transdermal or transepithelial composition substantially free of water comprising a biologically active agent in the form of microfine particles, sized less than 2 microns down to less than 0.1 microns, which by message pressure are mechanically entrained within the interstices of the stratum corneum. Particles less than 0.5 microns do not require a carrier for entrainment. Delivery into mucosal epithelia is obtained by particles less than one micron with delivery increasing with decreasing particle size.

IT 59-30-3 Polic acid, biological studies

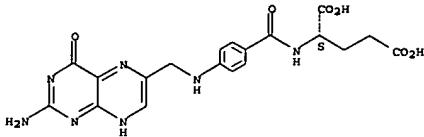
(water-free transdermal and transepithelial drug delivery systems)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-

-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 5 OF 71 USPATFULL  
 ACCESSION NUMBER: 2002:27445 USPATFULL  
 TITLE: Flavopipridol drug combinations and methods with reduced side effects

INVENTOR(S): Ratin, Mark J., Chicago, IL, UNITED STATES  
 Innocenti, Federico, Chicago, IL, UNITED STATES  
 Iyer, Lalitha, Chicago, IL, UNITED STATES

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2002016293 A1 20020207

APPLICATION INFO.: US 2001-835082 A1 20010412 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-553829, filed on 21 Apr 2000, PENDING

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: Gina N. Shishica, Fulbright & Jaworski L.L.P., Suite 2400, 600 Congress Avenue, Austin, TX, 78701

NUMBER OF CLAIMS: 99

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 7 Drawing Page(s)

LINE COUNT: 5370

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods, formulations and kits to reduce the toxicity of flavopipridol and analogs thereof. Disclosed are therapeutics

and treatment methods employing such drugs in combination with agents that increase conjugative enzyme activity or glucuronyltransferase activity, and agents that decrease biliary transport protein activity, such as cyclosporine A, the resultant effects of which are to decrease the significant side effects previously associated with treatment using these drugs. The invention also characterizes specific isoforms of glucuronyltransferase enzymes involved in glucuronidation of flavopipridols and their analogs.

IT 59-30-3D, reduced

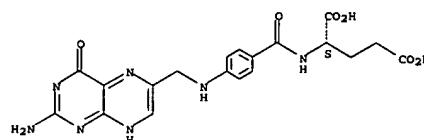
(flavopipridol drug combinations with glucuronyltransferase activity enhancer and methods with reduced side effects by enhancing its metab.)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-

-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 5 OF 71 USPATFULL (Continued)

L24 ANSWER 6 OF 71 USPATFULL  
 ACCESSION NUMBER: 2002:8204 USPATFULL  
 TITLE: In vivo screen using chemical inducers of dimerization  
 INVENTOR(S): Cornish, Virginia W., New York, NY, UNITED STATES

NUMBER	KIND	DATE
--------	------	------

PATENT INFORMATION: US 2002004402 A1 20020110

APPLICATION INFO.: US 2001-768479 A1 20010124 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-490320, filed on 24 Jan 2000, PENDING

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: John P. White, Cooper & Dunham LLP, 1185 Avenue of the Americas, New York, NY, 10036

NUMBER OF CLAIMS: 140

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 23 Drawing Page(s)

LINE COUNT: 2080

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention provides a compound having the formula:

H1--X--B--Y--H2

wherein each of H1 and H2 may be the same or different and capable of binding to a receptor which is the same or different; wherein each of X and Y may be present or absent and if present, each may be the same or different spacer moiety; and wherein B is an enzyme cleavable moiety. This invention also provides a method of screening proteins for the ability to catalyze bond cleavage, comprising the steps of:

a) providing a cell that expresses a pair of fusion proteins which upon dimerization change a cellular readout;

b) providing the compound of the invention which dimerizes the pair of fusion proteins, said compound comprising two portions coupled by a bond

that is cleavable by the protein to be screened; and

c) screening for the cellular readout, wherein a change in the cellular readout indicates catalysis of bond cleavage by the protein to be screened. Finally, the invention also provides a method of screening proteins for the ability to catalyze bond formation, comprising the steps of:

a) providing a cell that expresses a pair of fusion proteins which upon dimerization activate a cellular readout;

b) providing a first compound and a second compound, each being capable of binding to one of the pair of fusion proteins, said first and second compound comprising a portion through which the first and second compounds are coupled to form the inventive compound by the action of the bond forming protein to be screened; and

c) screening for the cellular readout, wherein a change in the cellular readout indicates catalysis of bond formation by the protein to be screened.

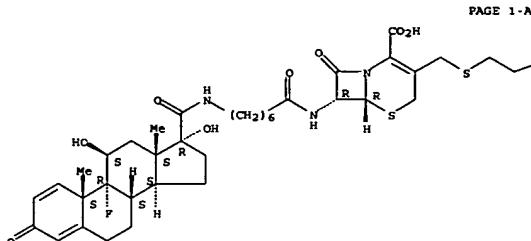
IT 389085-33-0 389085-34-1  
 (yeast three-hybrid system for in vivo drug screening and enzyme evolution using chem. inducers of dimerization)

RN 389085-33-0 USPATFULL

L24 ANSWER 6 OF 71 USPATFULL (Continued)  
 CN 5-**T**-1-(4-[2.0]oct-1-ene-2-carboxylic acid,  
 3-[[2-[(4S)-4-carboxy-4-[[4-[(2,4-diamino-6-  
 pteridinyl)methyl]methylamino]benzoyl]amino]-1-

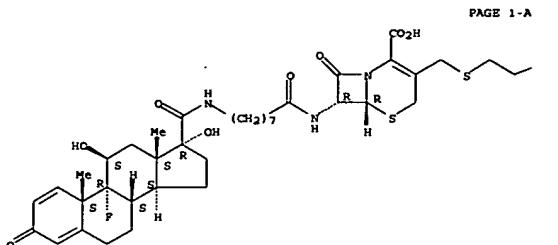
**oxobutyl]amino}ethyl]thio)methyl]-7-[(7-[(11.*beta*.,17.*alpha*.)-9-fluoro-11,17-dihydroxy-3-oxoandrosta-1,4-dien-17-yl]carbonyl)amino]-1-oxohexyl]amino]-8-oxo- (6R,7R) - (9CI) (CA INDEX NAME)**

### Absolute stereochemistry.

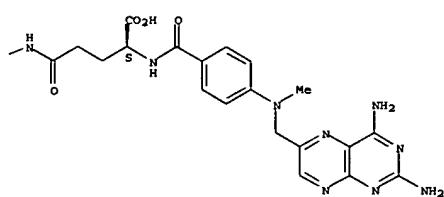


PAGE 1-A

PAGE 1-A



PAGE 1



PAGE 1-2

RN 389085-34-1 USPATFULL  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[2-[(4-R)-4-carboxy-4-[[4-[[2,4-diamino-6-  
pteridinyl)methyl]methylamino]benzoyl]amino]-1-

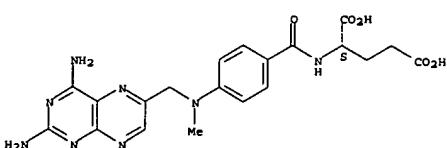
oxobutyl]amino]ethyl]thio)methyl)-7-[(8-[[[11. $\beta$ ,17. $\alpha$ ]-9-fluoro-

IT 59-05-2D, Methotrexate, conjugates with receptor ligands  
(yeast three-hybrid system for *in vivo* drug screening and enzyme evolution using chem. inducers of dimerization)

RN 59-05-2 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoic acid (CA INDEX NAME)

### Absolute stereochemistry.

L24 ANSWER 6 OF 71 USPATFULL (Continued)



L24 ANSWER 7 OF 71 USPATFULL  
ACCESSION NUMBER: 2002-95380 USPATFULL  
TITLE: Fusogenic lipids and vesicles  
INVENTOR(S): Leaman, Christopher Paul, West Lafayette, IN, United States  
PATENT ASSIGNEE(S): ISIS Pharmaceuticals, Inc., Carlsbad, CA, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6379698	B1	20020430
APPLICATION INFO.:	US 1999-287175		19990406 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Nguyen, Dave T.		
LEGAL REPRESENTATIVE:	Woodcock Washburn LLP		
NUMBER OF CLAIMS:	1		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	2 Drawing Figures (1) A Drawing (1) B		

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)  
LINE COUNT: 925  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel lipid compounds are provided that may be termed "pro-cationic" in that they are neutral or negatively charged until they are either brought into contact with cellular membranes or are internalized by cells. The lipids have a hydrophobic tail group and a hydrophilic head group, the head group incorporating both a positively and negatively charged region at physiological pH. The hydrophobic tail group is

**stable** connected to the positive region of the head group which in turn is connected to the negative region by a disulfide bond that is **susceptible**

the group to cleavage by membrane-bound and intracellular factors. Cleavage of disulfide bond removes the negatively charged region from the head resulting in a lipid that is cationic and therefore fusogenic with negatively charged cell membranes. Consequently, lipids of the

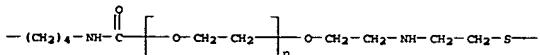
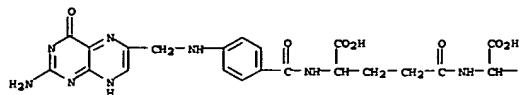
negatively charged cell membranes. Consequently, lipids of the invention are useful as components of liposomes that serve as vehicles for delivering pharmaceutical agents into cells with reduced toxicity.

IT 300711-56-2P  
(fusogenic lipids and vesicles for liposome drug delivery systems)  
RN 300711-56-2 USP&PULL  
CN Poly(oxy-1,2-ethanediyl),

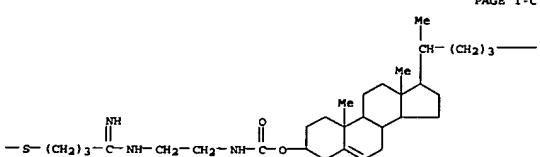
.alpha.-hydro-.omega.-[(16-[3.beta.]-cholest-5-en-3-*yl*oxy)-11-imino-16-oxo-6,7-dithio-3,12,15-triazahexadec-1-*yl*oxy]-26-ester with N-[4-(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-L-.gamma.-glutamyl-N6-carboxy-L-lysine (9CI) (CA INDEX NAME)

L24 ANSWER 7 OF 71 USPATFULL (Continued)

PAGE 1-A

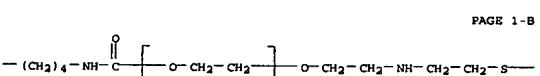
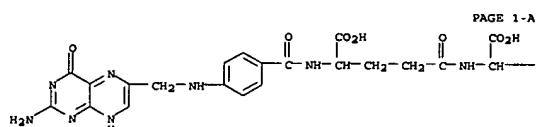


PAGE 1-B



L24 ANSWER 7 OF 71 USPATFULL (Continued)

PAGE 1-A



PAGE 1-B



PAGE 1-C



L24 ANSWER 7 OF 71 USPATFULL (Continued)

L24 ANSWER 7 OF 71 USPATFULL (Continued)

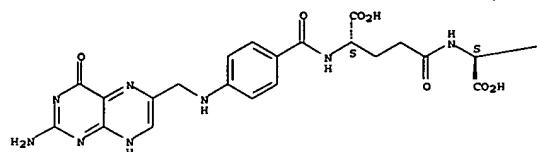
PAGE 1-D

—CHMe<sub>2</sub>

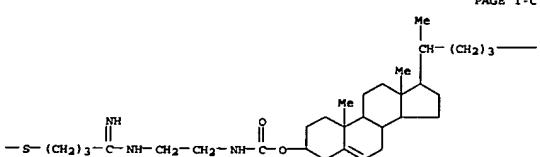
IT 300711-64-3  
(prepn. of fusogenic lipids and vesicles for liposome drug delivery systems)  
RN 300711-64-2 USPATFULL  
CN L-Lysine, N-[4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino]benzoyl-L-.gamma.-glutamyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L24 ANSWER 7 OF 71 USPATFULL (Continued)

L24 ANSWER 8 OF 71 USPATFULL

ACCESSION NUMBER: 2002-88231 USPATFULL  
TITLE: Methods and compositions for assaying analytes  
INVENTOR(S): Yuan, Chong-Sheng, San Diego, CA, United States  
PATENT ASSIGNEE(S): General Atomics, San Diego, CA, United States (U.S. corporation)

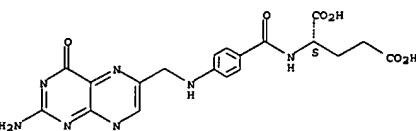
NUMBER	KIND	DATE
PATENT INFORMATION: US 6376210	B1	20020423
APPLICATION INFO.: US 1999-347878		19990706 (9)
DOCUMENT TYPE: Utility		
FILE SEGMENT: GRANTED		
PRIMARY EXAMINER: Achutamurthy, Ponnathapu		
ASSISTANT EXAMINER: Saidha, Tekchand		
LEGAL REPRESENTATIVE: Morrison & Foerster LLP		
NUMBER OF CLAIMS: 16		
EXEMPLARY CLAIM: 1		
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)		
LINE COUNT: 9004		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for assaying analytes, preferably, small molecule analytes. Assay methods that employ, in place of antibodies or molecules that bind to target analytes or substrates, modified enzymes, called substrate trapping enzymes. These modified enzymes retain binding affinity or have enhanced binding affinity for a target substrate or analyte, but have attenuated catalytic activity with respect to that substrate or analyte. The modified enzymes are also provided. In particular, a mutant 5'-adenosylhomocysteine (SAH) hydrolases, substantially retaining binding affinity or having enhanced binding affinity for Hcy or SAH but having attenuated catalytic activity, are provided. Also provided are methods, combinations, kits and articles of manufacture for assaying analytes, preferably small molecule analytes such as inorganic ions, amino acids (e.g., homocysteine), peptides, nucleosides, nucleotides, oligonucleotides, vitamins, monosaccharides (e.g., glucose), oligosaccharides, lipids (e.g., cholesterol), organic acids (e.g., volatile species, bile acids and uric acids).

IT 59-30-3, analysis  
(method and compns. for assaying analytes)  
RN 59-30-3 USPATFULL  
CN L-Glutamic acid, N-[4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 9 OF 71 USPATFULL  
 ACCESSION NUMBER: 2002:45363 USPATFULL  
 TITLE: Nutritional composition  
 INVENTOR(S): Kirschner, Mitchell I., St. Louis, MO, United States  
 Levinson, R. Saul, Chesterfield, MO, United States  
 Paradissis, George N., St. Louis, MO, United States  
 PATENT ASSIGNEE(S): Drugtech Corporation, Wilmington, DE, United States  
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6352713	B1	20020305
APPLICATION INFO.:	US 1999-451849		19991201 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Page, Thurman K.		
ASSISTANT EXAMINER:	Tran, S.		
LEGAL REPRESENTATIVE:	Nath & Associates PLLC, Nath, Gary M., Goldberg, Joshua		

NUMBER OF CLAIMS: 51  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)  
 LINE COUNT: 1297

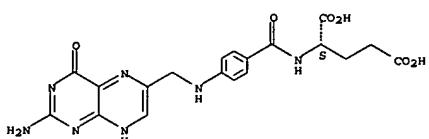
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present inventive subject matter is directed to novel chewable prenatal nutritional supplements which contain vitamin C, as well as novel methods for providing optimal vitamin C supplementation to pregnant women. The present invention is also directed to novel compositions and methods for providing nutritional supplementation to individuals planning to conceive a child.

IT 59-30-3, Folic acid, biological studies  
 (nutritional compn. comprising vitamin C)

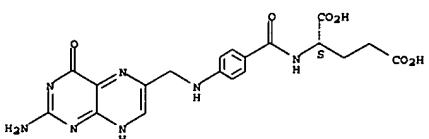
RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 10 OF 71 USPATFULL (Continued)

Absolute stereochemistry.



L24 ANSWER 10 OF 71 USPATFULL  
 ACCESSION NUMBER: 2002:14058 USPATFULL  
 TITLE: Reagent system and method for increasing the luminescence of lanthanide(III) macrocyclic complexes  
 INVENTOR(S): Leit, Robert C., 5648 Toyon Rd., San Diego, CA, United States 92115-1022  
 Valarino, Lidia, 1009 West Ave, Richmond, VA, United States 23220

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6340744	B1	20020122
APPLICATION INFO.:	US 2000-484670		200000118 (9)

	NUMBER	DATE
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PRIORITY INFORMATION: US 1999-116316P 19990119 (60)

DOCUMENT TYPE: Utility  
 FILE SEGMENT: GRANTED  
 PRIMARY EXAMINER: Hartley, Michael G.  
 LEGAL REPRESENTATIVE: Schwartz, Robert M., Kauder, Otto S., Hibnick, Gerald R.

NUMBER OF CLAIMS: 40  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 13 Drawing Figure(s); 13 Drawing Page(s)  
 LINE COUNT: 2136

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are a spectrofluorimetrically detectable luminescent composition and processes for enhancing the luminescence of one or more lanthanide-containing macrocycles. The luminescent composition comprises

a micelle-producing amount of at least one surfactant, at least one energy transfer acceptor lanthanide element macrocycle compound having an emission spectrum peak in the range from 500 to 950 nanometers, and

a luminescence-enhancing amount of at least one energy transfer donor compound of yttrium or a 3-valent lanthanide element having atomic number 59-71, provided that the lanthanide element of said macrocycle compound and the lanthanide element of said energy transfer donor compound are not identical. The addition of gadolinium(III) in the presence of other solutes to both the prototype and the difunctionalized europium, samarium, and terbium macrocyclic complexes, which were

taught in our U.S. Pat. Nos. 5,373,093 and 5,696,240, enhances their luminescence. Similar enhancements of luminescence also results for the mono-functionalized europium, samarium, and terbium macrocyclic complexes, which were taught in our U.S. Pat. No. 5,696,240. The enhanced luminescence afforded by the composition enables the detection and/or quantitation of many analytes in low concentrations without the use of expensive, complicated time-gated detection systems.

IT 59-30-3, Folic acid, analysis  
 (a reagent system and method for increasing luminescence of lanthanide(III) macrocyclic complexes)

RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

L24 ANSWER 11 OF 71 USPATFULL

ACCESSION NUMBER: 2001:224132 USPATFULL  
 TITLE: Antioxidant enhancement of therapy for hyperproliferative conditions  
 INVENTOR(S): Chinery, Rebecca, Nashville, TN, United States  
 Beauchamp, R. Daniel, Nashville, TN, United States  
 Coffey, Robert J., Woodside, CA, United States  
 Medford, Russell M., Atlanta, GA, United States  
 Wedzinski, Brian E., Nashville, TN, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001049349	A1	20011206
APPLICATION INFO.:	US 2001-779086	A1	20010207 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-108609, filed on 1 Jul 1998, ABANDONED		

CONTINUATION OF Ser. No. US 1997-967492, filed on 11 Nov 1997, ABANDONED  
 Continuation-in-part of Ser. No. US 1997-886653, filed on 1 Jul 1997, ABANDONED

DOCUMENT TYPE: APPLICATION  
 FILE SEGMENT:  
 LEGAL REPRESENTATIVE: Sherry M. Knowles, Esq., KING & SPALDING, 45th Floor, 191 Peachtree Street, N.E., Atlanta, GA, 30303

NUMBER OF CLAIMS: 30  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 28 Drawing Page(s)

LINE COUNT: 2353

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

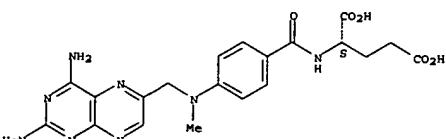
AB A method to enhance the cytotoxic activity of an antineoplastic drug comprising administering an effective amount of the antineoplastic drug to a host exhibiting abnormal cell proliferation in combination with an effective cytotoxicity-increasing amount of an antioxidant. The invention also includes a method to decrease the toxicity to an antineoplastic agent or increase the therapeutic index of an antineoplastic agent administered for the treatment of a solid growth

of abnormally proliferating cells, comprising administering an antioxidant prior to, with, or following the antineoplastic treatment.

IT 59-05-2, Methotrexate 15475-56-6 Methotrexate sodium  
 (antioxidant enhancement of therapy for hyperproliferative conditions)

RN 59-05-2 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2,4-diamino-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

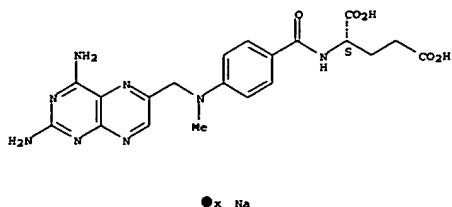
Absolute stereochemistry.



RN 15475-56-6 USPATFULL

L24 ANSWER 11 OF 71 USPATFULL (Continued)  
 CN L-Glutamic acid, N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl], sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 12 OF 71 USPATFULL  
 ACCESSION NUMBER: 2001:223698 USPATFULL  
 TITLE: Radioactive therapeutic liposomes  
 INVENTOR(S): Larsen, Roy H., Bekkestua, Norway  
 Henriksen, Gjermund, Mjondalen, Norway

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001048914	A1	20011206
APPLICATION INFO.:	US 2001-790260	A1	20010221 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	ND 2000-855	20000221
	WO 2001-N065	20010221
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	CLARK & ELBING LLP, 176 FEDERAL STREET, BOSTON, MA, 02110-2214	
NUMBER OF CLAIMS:	32	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	1005	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

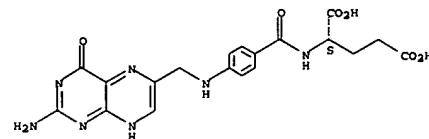
AB The present invention relates to a conjugator system comprising liposomes with ionophores, and with chelator solution and alpha-particle emitting radionuclide(s) located inside of the liposome. Furthermore, a method for the preparation of this type of radioactive liposomes is described, as well as use of the system and a kit for preparing the system.

IT 59-30-3D9. Polic acid, conjugates (radioactive therapeutic liposomes conjugated to proteins or other receptor-affinic mols.)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl] (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 13 OF 71 USPATFULL  
 ACCESSION NUMBER: 2001:212421 USPATFULL  
 TITLE: Compound containing a labile disulfide bond  
 INVENTOR(S): Wolff, Jon A., Madison, WI, United States  
 Monahan, Sean D., Madison, WI, United States  
 Budker, Vladimir G., Middleton, WI, United States  
 Slattum, Paul M., Madison, WI, United States  
 Rozema, David B., Madison, WI, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001044417	A1	20011122
APPLICATION INFO.:	US 2001-779791	A1	20010208 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-312351, filed on 14 May 1999, PENDING		

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: Mark K. Johnon, PO Box 510644, New Berlin, WI, 53151-0644

NUMBER OF CLAIMS: 13  
 EXEMPLARY CLAIM: 1  
 LINE COUNT: 2264  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A labile disulfide-containing compound under physiological conditions containing a labile disulfide bond and a transduction signal.

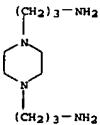
IT 313056-36-9P (compd. contg. a labile disulfide bond)

RN 313056-36-9 USPATFULL

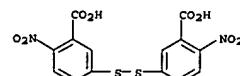
CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, polymer with 3,3'-dithiobis[6-nitrobenzoic acid] and 1,4-piperazinedipropenamine (9CI) (CA INDEX NAME)

CM 1

CRN 7209-38-3  
 CMF C10 H24 N4



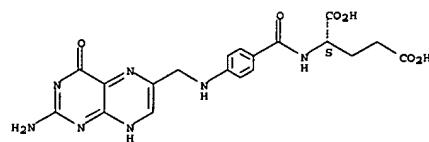
L24 ANSWER 13 OF 71 USPATFULL (Continued)



CM 3

CRN 59-30-3  
 CMF C19 H19 N7 O6  
 CDES 5:L

Absolute stereochemistry.



CM 2

CRN 69-78-3  
 CMF C14 H8 N2 O8 S2

## L24 ANSWER 14 OF 71 USPATFULL

ACCESSION NUMBER: 2001:14360 USPATFULL  
 TITLE: Receptor binding conjugates  
 INVENTOR(S): Larsen, Roy H., Bekkestua, Norway  
 Henriksen, Gjermund, Mjondalen, Norway

NUMBER	KIND	DATE
US 2001008625	A1	20010719
US 2000-731301	A1	20001205 (9)

NUMBER	DATE
NO 1999-5978	19991206

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: Paul T. Clark, Clark & Elbing LLP, 176 Federal Street, Boston, MA, 02110  
 NUMBER OF CLAIMS: 24  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 6 Drawing Page(s)  
 LINE COUNT: 774

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

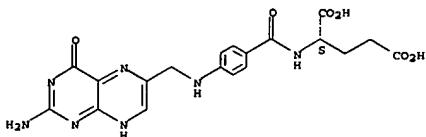
AB The present invention relates to a receptor binding conjugate which consists of an antibody, a radionuclide and folate or a folate derivative, wherein or not the conjugate possesses dual binding ability. The present invention also relates to a method and a kit to prepare, as well as a method to use, such conjugates. Furthermore, the use of a conjugate according to the present invention to prepare a pharmaceutical solution is disclosed.

IT 59-30-3DP, (derivative) conjugates  
 (receptor binding conjugates comprising antibody and radionuclide and folate for radiotherapy and imaging)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 59-30-3, Folic acid, reactions  
 (receptor binding conjugates comprising antibody and radionuclide and folate for radiotherapy and imaging)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

## L24 ANSWER 15 OF 71 USPATFULL

ACCESSION NUMBER: 2001:95283 USPATFULL  
 TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications  
 INVENTOR(S): Wedeking, Paul W., Pennington, NJ, United States  
 Wager, Ruth E., Rockville, MD, United States  
 Arunachalam, Thangavel, Plainboro, NJ, United States  
 Ramalingam, Kondareddiar, Dayton, NJ, United States  
 Linder, Karen E., Kingston, NJ, United States  
 Ranganathan, Ramachandran S., Princeton, NJ, United States  
 Nunn, Adrian D., Lambertville, NJ, United States  
 Raju, Natarajan, Kendall Park, NJ, United States  
 Tweedie, Michael F., Princeton, NJ, United States

NUMBER	KIND	DATE
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US 2001004454	A1	20010621
US 2000-752867	A1	200001230 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-477072, filed on 3 Jan 2000, PENDING Division of Ser. No. US 1998-80157, filed

on 16 May 1998, GRANTED, Pat. No. US 6093382

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: The Law Offices of Imre Balogh, 276 Smith School Road, Perkasie, PA, 18944

NUMBER OF CLAIMS: 127

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 32 Drawing Page(s)

LINE COUNT: 4979

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Diagnostic and therapeutic compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or .beta. isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.

IT 251084-37-4P 251084-40-9P 251084-43-2P

251084-49-8P 251084-50-1P 251084-51-2P

(prepn. and reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-37-4 USPATFULL

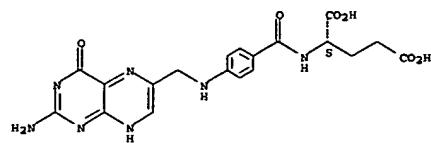
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[(4S)-4-

[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino  
 ]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

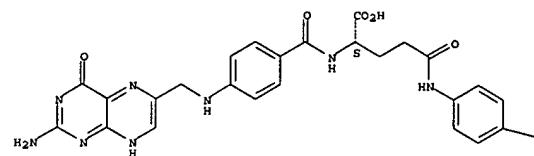
## L24 ANSWER 14 OF 71 USPATFULL (Continued)

Absolute stereochemistry.

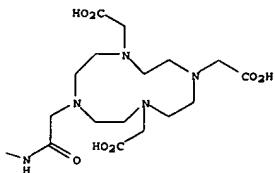


## L24 ANSWER 15 OF 71 USPATFULL (Continued)

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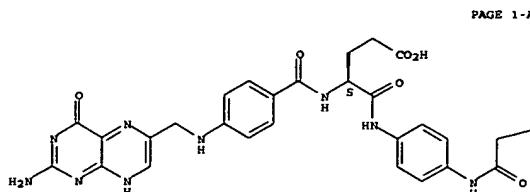


RN 251084-40-9 USPATFULL  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[(4S)-4-

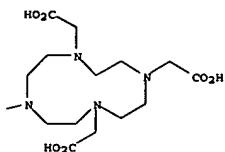
[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino  
 ]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 15 OF 71 USPATFULL (Continued)



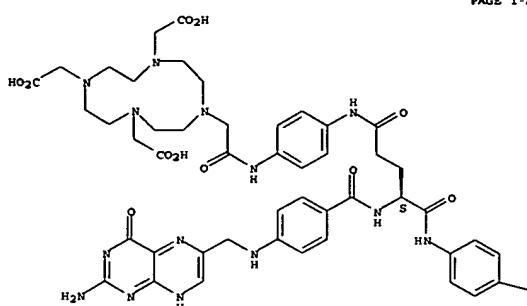
PAGE 1-B



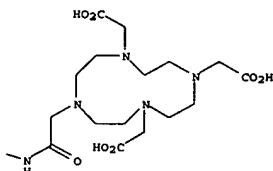
RN 251084-43-2 USPATFULL  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-[{(2S)-2-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-1,5-dioxo-1,5-pentanediyil]bis[imino-4,1-phenyleneimino(2-oxo-2,1-ethanediyl)]bis- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

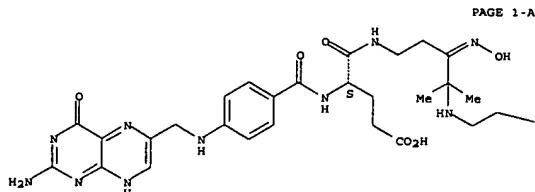
L24 ANSWER 15 OF 71 USPATFULL (Continued)



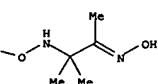
PAGE 1-B



RN 251084-49-8 USPATFULL  
 CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid, 15-[(4-[(2-amino-1,4-dihydro-4-

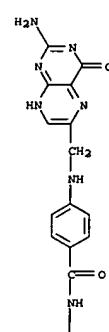
L24 ANSWER 15 OF 71 USPATFULL (Continued)  
 oxo-6-pteridinyl)methyl]amino]benzoyl]amino)-2,10-bis(hydroxyimino)-3,3,9,9-tetramethyl-14-oxo-, (15S)- (9CI) (CA INDEX NAME)Absolute stereochemistry.  
Double bond geometry unknown.

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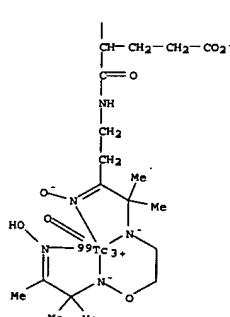


RN 251084-50-1 USPATFULL  
 CN Technetate(1-)-99Tc, [(4S)-4-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-9,17-bis(hydroxyimino-.kappa.N)-10,10,16,16-tetramethyl-5-oxo-14-oxa-6,11,15-triazaoctadecanoato(4-)-, hydrogen, (SP-5-15)- (9CI) (CA INDEX NAME)

L24 ANSWER 15 OF 71 USPATFULL (Continued)



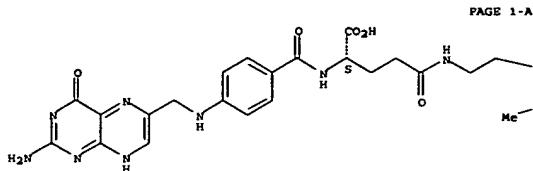
PAGE 1-B



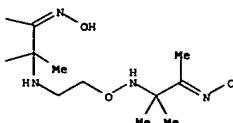
RN 251084-51-2 USPATFULL  
 CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid, 17-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino)-2,10-bis(hydroxyimino)-

L24 ANSWER 15 OF 71 USPATFULL (Continued)  
3,3,9,9-tetramethyl-14-oxo-, (17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



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IT 251084-38-5P 251084-39-6P 251084-41-0P  
251084-42-1P 251084-44-3P 251084-45-4P  
251084-52-3P

(prepn. for use in diagnostic and therapeutic applications)

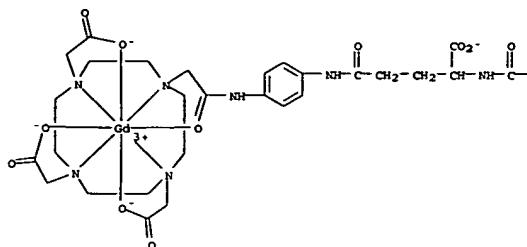
RN 251084-38-5 USPATFULL

CN Gadolinate(1-), [10-[2-[[4-[(4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenylamino]-2-(oxo-.kappa.Oethyl)-1,4,7,10-

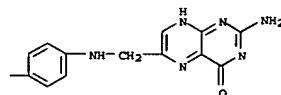
tetraazacyclododecane-1,4,7-triacetato(4-).kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7], sodium (9CI) (CA INDEX NAME)

L24 ANSWER 15 OF 71 USPATFULL (Continued)

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● Na<sup>+</sup>

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RN 251084-39-6 USPATFULL

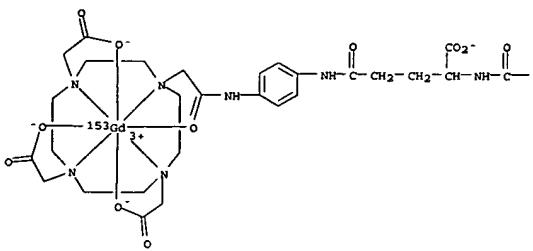
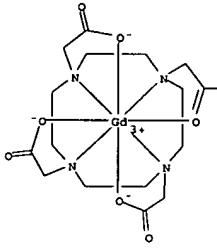
CN Gadolinate(1-)-153Gd, [10-[2-[[4-[(4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenylamino]-2-(oxo-.kappa.Oethyl)-1,4,7,10-

tetraazacyclododecane-1,4,7-triacetato(4-).kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7], sodium (9CI) (CA INDEX NAME)

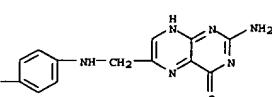
L24 ANSWER 15 OF 71 USPATFULL (Continued)

L24 ANSWER 15 OF 71 USPATFULL (Continued)

PAGE 1-A

● Na<sup>+</sup>● Na<sup>+</sup>

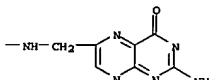
PAGE 1-B



RN 251084-41-0 USPATFULL

CN Gadolinate(1-), (10-[2-[[4-[(2-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenylamino)-2-(oxo-.kappa.Oethyl)-1,4,7,10-

tetraazacyclododecane-1,4,7-triacetato(4-).kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7], sodium (9CI) (CA INDEX NAME)



RN 251084-42-1 USPATFULL

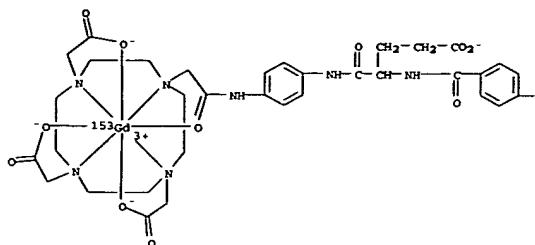
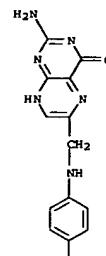
CN Gadolinate(1-)-153Gd, [10-[2-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenylamino)-2-(oxo-.kappa.Oethyl)-1,4,7,10-

tetraazacyclododecane-1,4,7-triacetato(4-).kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7], sodium (9CI) (CA INDEX NAME)

L24 ANSWER 15 OF 71 USPATFULL (Continued)

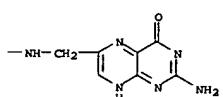
L24 ANSWER 15 OF 71 USPATFULL (Continued)

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● Na<sup>+</sup>

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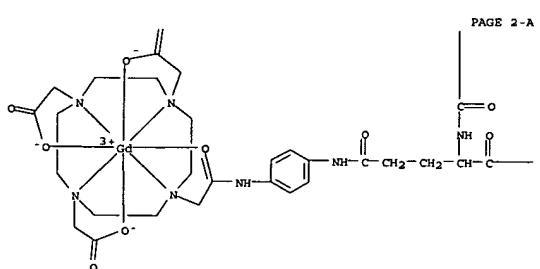
RN 251084-44-3 USPATFULL  
 CN Gadolinium, [(mu-[(10,10'-(2-[4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl)amino]-1,5-dioxo-1,5-pentanediyl)bis(imino-4,1-phenyleneimino)[2-(oxo-.kappa.O)-2,1-ethanediyl])bis[1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]](6-)]di- (9CI) (CA INDEX NAME)

O

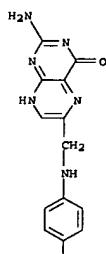
L24 ANSWER 15 OF 71 USPATFULL (Continued)

L24 ANSWER 15 OF 71 USPATFULL (Continued)

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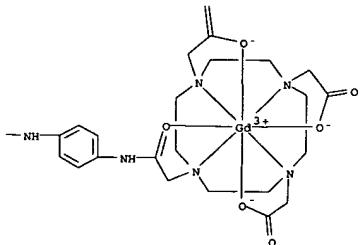


PAGE 2-A



PAGE 2-B

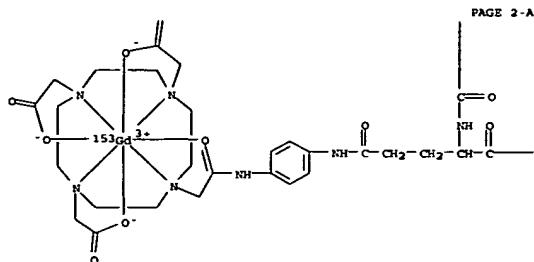
PAGE 1-B



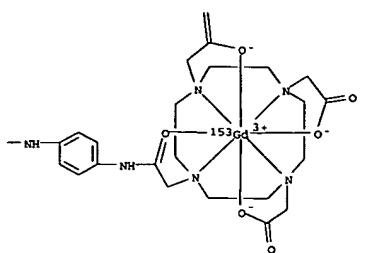
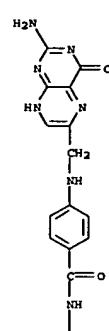
RN 251084-45-4 USPATFULL  
 CN Gadolinium-153Gd, [(mu-[(10,10'-(2-[4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl)amino]-1,5-dioxo-1,5-pentanediyl)bis(imino-4,1-phenyleneimino)[2-(oxo-.kappa.O)-2,1-ethanediyl])bis[1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]](6-)]di- (9CI) (CA INDEX NAME)

O

L24 ANSWER 15 OF 71 USPATFULL (Continued)

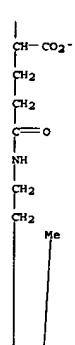


L24 ANSWER 15 OF 71 USPATFULL (Continued)



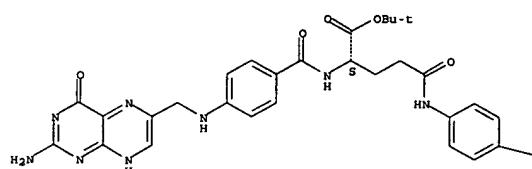
RN 251084-52-3 USPATFULL  
 CN Technetate(1-) -99Tc, ((2S)-2-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino)-9,17-bis(hydroxymino-kappa.N)-10,10,16,16-tetramethyl-5-oxo-14-oxa-6,11,15-triazaoctadecanoato(4-))-, hydrogen, (SP-5-15) - (9CI) (CA INDEX NAME)

L24 ANSWER 15 OF 71 USPATFULL (Continued)

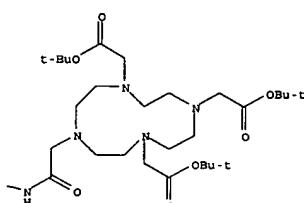
L24 ANSWER 15 OF 71 USPATFULL (Continued)  
 triis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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RN 251084-60-3 USPATFULL  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[(2S)-2-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino)-1-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-, triis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

 $\bullet H^+$ 

IT 251084-56-7P 251084-60-3P 251084-64-7P

251084-76-1P 251084-80-7P

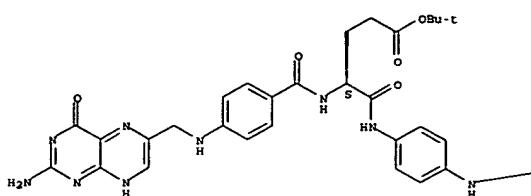
(reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-56-7 USPATFULL

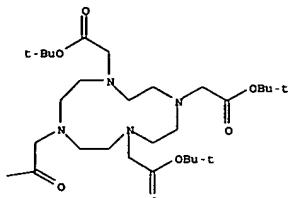
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[(4S)-4-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino)-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-

L24 ANSWER 15 OF 71 USPATFULL (Continued)

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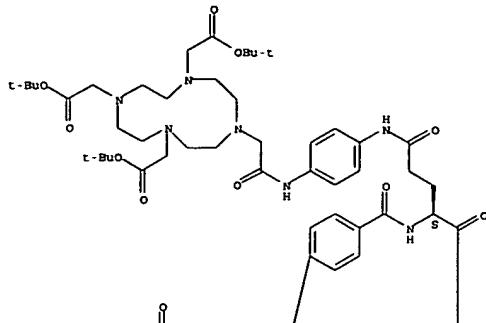


RN 251084-64-7 USPATFULL  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-([(2S)-2-[(4-oxo-6-pteridinyl)methyl]amino]benzoylamino]-1,5-dioxo-1,5-pentanediyil)bis[imino-4,1-phenyleneimino(2-oxo-2,1-ethanediyl)]bis-, hexakis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

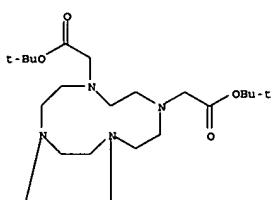
Absolute stereochemistry.

L24 ANSWER 15 OF 71 USPATFULL (Continued)

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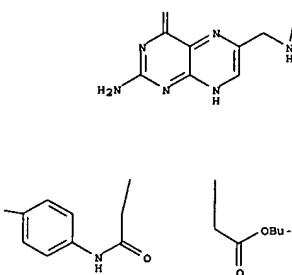
PAGE 1-B



L24 ANSWER 15 OF 71 USPATFULL (Continued)

L24 ANSWER 15 OF 71 USPATFULL (Continued)  
 INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry unknown.

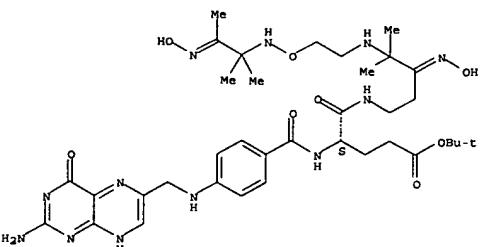


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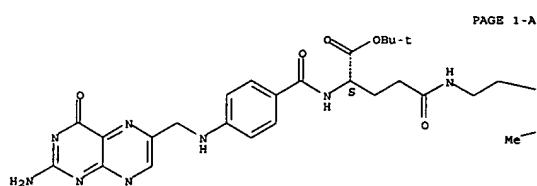
PAGE 2-B

RN 251084-76-1 USPATFULL  
 CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
 15-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoylamino]-2,10-bis(hydroxyimino)-3,3,9,9-tetramethyl-14-oxo-, 1,1-dimethylethyl ester, (15S)- (9CI) (CA INDEX NAME)

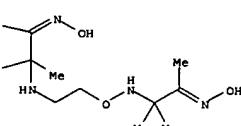
Absolute stereochemistry.  
 Double bond geometry unknown.



RN 251084-80-7 USPATFULL  
 CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
 17-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoylamino]-2,10-bis(hydroxyimino)-3,3,9,9-tetramethyl-14-oxo-, 1,1-dimethylethyl ester, (17S)- (9CI) (CA INDEX NAME)



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## L24 ANSWER 16 OF 71 USPATFULL

ACCESSION NUMBER: 2001208679 USPATFULL  
 TITLE: Nucleic acids encoding mutant human carboxypeptidase A enzymes  
 INVENTOR(S): Smith, Gary Keith, Raleigh, NC, United States  
 Blumenkopf, Todd Andrew, Old Lyme, CT, United States  
 Cory, Michael, Chapel Hill, NC, United States  
 PATENT ASSIGNEE(S): Glaxo Wellcome, Inc., Research Triangle Park, NC,  
 United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6319702 B1 20011120  
 APPLICATION INFO.: US 1999-395936 19990914 (9)  
 RELATED APPLN. INFO.: Continuation of Ser. No. US 640906, now patented, Pat.  
 No. US 6140100

NUMBER DATE

PRIORITY INFORMATION: GB 1993-23429 19931112

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Achutamurthy, Ponnathapu

ASSISTANT EXAMINER: Moore, William W.

LEGAL REPRESENTATIVE: Bennett, Virginia C.

NUMBER OF CLAIMS: 30

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 7 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT: 7093

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to nucleic acid molecules encoding mutant human carboxypeptidase A enzymes, and encoding conjugates of targeting molecules and mutant human carboxypeptidase A enzymes. The invention further relates to vectors and cell lines containing such nucleic acid molecules.

IT 167549-87-3P 167549-96-4P 167550-14-3P  
 167550-27-8P 167550-54-1P 167550-61-0P  
 167550-81-4P 167550-86-9P 167550-98-3P  
 167551-08-8P

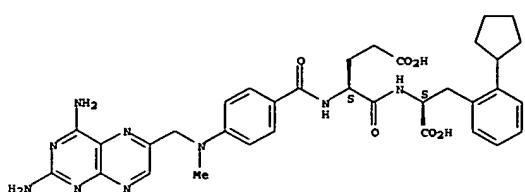
(improvement of antibody-directed enzyme prodrug therapy (ADEPT))

RN 167549-87-3 USPATFULL

CN L-Phenylalanine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
 yl]-L-.alpha.-glutamyl-2-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 16 OF 71 USPATFULL (Continued)

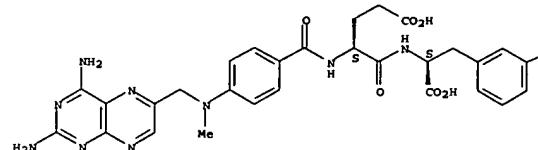


RN 167549-96-4 USPATFULL

CN L-Phenylalanine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
 yl]-L-.alpha.-glutamyl-3-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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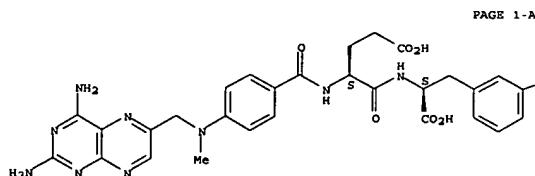
RN 167550-14-3 USPATFULL

CN L-Phenylalanine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
 yl]-L-.alpha.-glutamyl-3-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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## L24 ANSWER 16 OF 71 USPATFULL (Continued)



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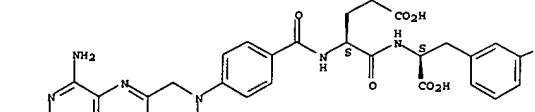
PAGE 1-B

$\text{Bu-t}$

RN 167550-27-8 USPATFULL  
 CN L-Phenylalanine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
 yl]-L-.alpha.-glutamyl-3-cyclobutyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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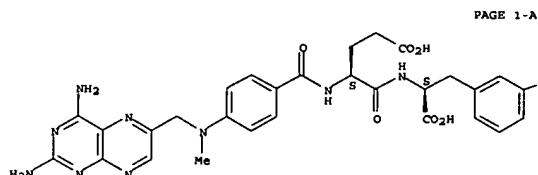
PAGE 1-B



RN 167550-54-1 USPATFULL  
 CN L-Phenylalanine,  
 N-[N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
 yl]-L-.alpha.-glutamyl-3-(trimethylsilyl)- (9CI) (CA INDEX NAME)

## L24 ANSWER 16 OF 71 USPATFULL (Continued)

Absolute stereochemistry.



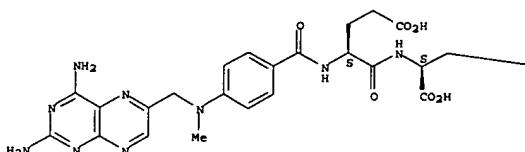
PAGE 1-B

$\text{SiMe}_3$

RN 167550-61-0 USPATFULL  
 CN L-Tyrosine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-L  
 .alpha.-glutamyl-3-cyclopentyl- (9CI) (CA INDEX NAME)

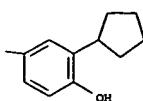
Absolute stereochemistry.

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L24 ANSWER 16 OF 71 USPATFULL (Continued)

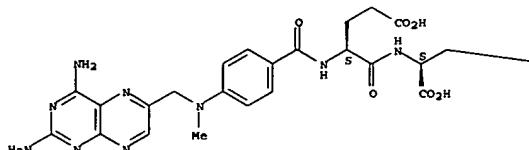
PAGE 1-B



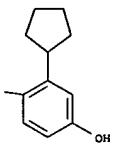
RN 167550-81-4 USPATFULL  
 CN L-Tyrosine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-  
 .alpha.-glutamyl-3-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B

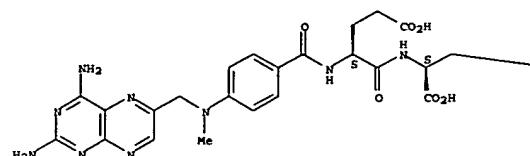


RN 167550-86-9 USPATFULL  
 CN L-Tyrosine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-

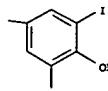
L24 ANSWER 16 OF 71 USPATFULL (Continued)  
 .alpha.-glutamyl-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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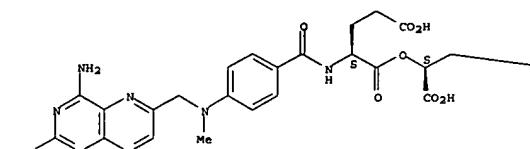
PAGE 1-B



RN 167550-98-3 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo-  
 yl-, 1-(1-carboxy-2-(3-cyclopentyl-4-hydroxyphenyl)ethyl) ester, (S)-  
 (9CI) (CA INDEX NAME)

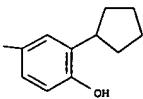
Absolute stereochemistry.

PAGE 1-A



L24 ANSWER 16 OF 71 USPATFULL (Continued)

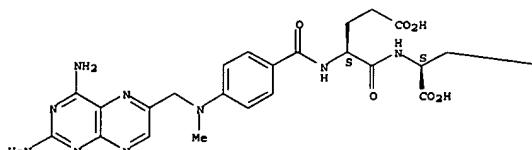
PAGE 1-B



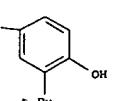
RN 167551-08-8 USPATFULL  
 CN L-Tyrosine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-  
 .alpha.-glutamyl-3-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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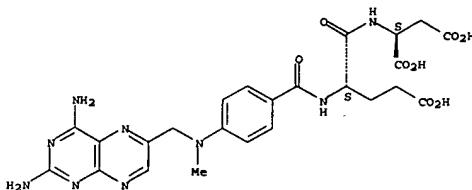
IT 71074-48-1P 118355-51-4P 167549-40-8P  
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 167549-67-9P 167549-75-9P 167549-76-0P  
 167549-86-2P 167549-95-3P 167550-05-2P  
 167550-06-3P 167550-13-2P 167550-26-7P  
 167550-35-8P 167550-53-0P 167550-60-9P  
 167550-71-2P 167550-72-3P 167550-80-3P  
 167550-85-8P 167550-97-2P 167551-07-7P  
 (Improvement of antibody-directed enzyme prodrug therapy (ADEPT))

RN 71074-48-1 USPATFULL

CN L-Aspartic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo-

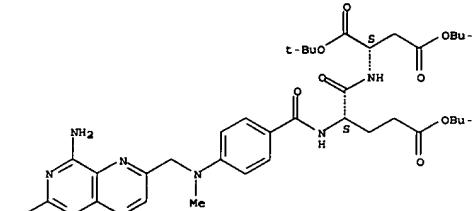
L24 ANSWER 16 OF 71 USPATFULL (Continued)  
 yl-L-.alpha.-glutamyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 118355-51-4 USPATFULL  
 CN L-Aspartic acid,  
 N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzo-  
 yl]-L-.alpha.-glutamyl-, triis(1,1-dimethylethyl) ester (9CI) (CA  
 INDEX NAME)

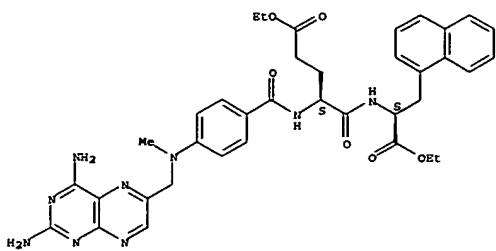
Absolute stereochemistry.



RN 167549-40-8 USPATFULL  
 CN L-Alanine,  
 N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-  
 L-.alpha.-glutamyl-3-(1-naphthalenyl)-, diethyl ester (9CI) (CA INDEX  
 NAME)

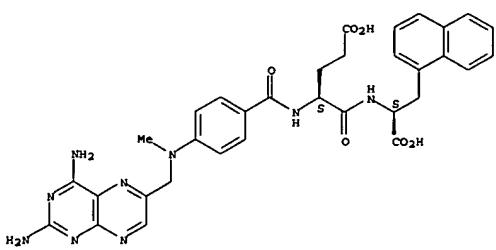
Absolute stereochemistry.

L24 ANSWER 16 OF 71 USPATFULL (Continued)



RN 167549-42-0 USPATFULL  
 CN L-Alanine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-3-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

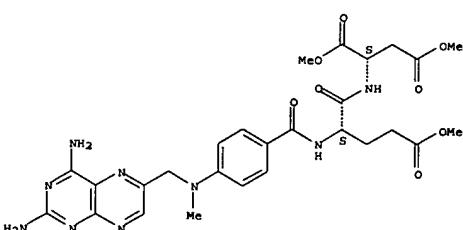
Absolute stereochemistry.



RN 167549-49-7 USPATFULL  
 CN L-Phenylalanine,  
 N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-L-.alpha.-glutamyl-2-(methoxycarbonyl)-, dimethyl ester (9CI) (CA INDEX NAME)

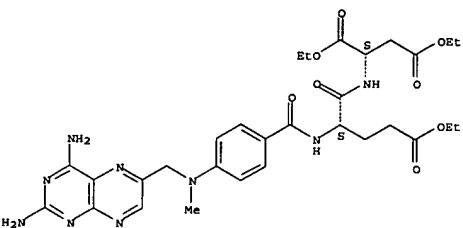
Absolute stereochemistry.

L24 ANSWER 16 OF 71 USPATFULL (Continued)



RN 167549-57-7 USPATFULL  
 CN L-Aspartic acid,  
 N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-L-.alpha.-glutamyl-, triethyl ester (9CI) (CA INDEX NAME)

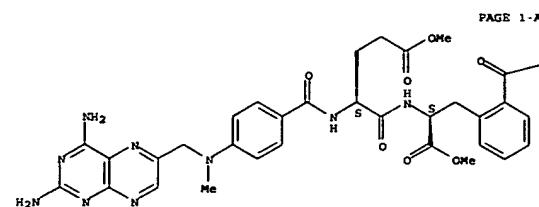
Absolute stereochemistry.



RN 167549-66-8 USPATFULL  
 CN L-Tyrosine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-3-[(1,1-dimethylethoxy)carbonyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

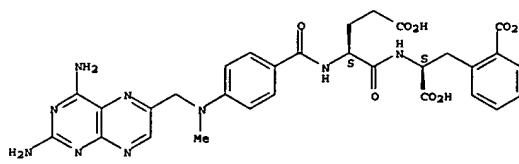
L24 ANSWER 16 OF 71 USPATFULL (Continued)



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—OMe  
 RN 167549-50-0 USPATFULL  
 CN L-Phenylalanine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-2-carboxy- (9CI) (CA INDEX NAME)

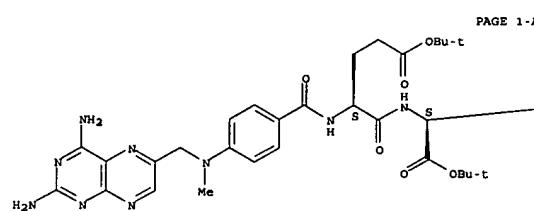
Absolute stereochemistry.



RN 167549-54-4 USPATFULL  
 CN L-Aspartic acid,  
 N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.alpha.-glutamyl-, trimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

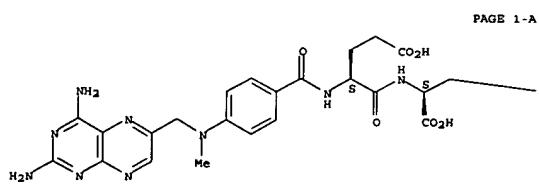
L24 ANSWER 16 OF 71 USPATFULL (Continued)



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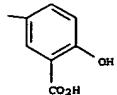
RN 167549-67-9 USPATFULL  
 CN L-Tyrosine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-3-carboxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



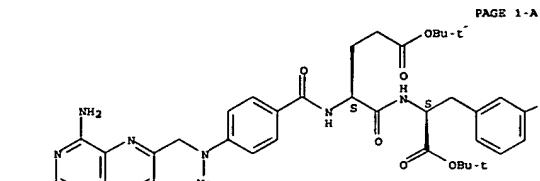
L24 ANSWER 16 OF 71 USPATFULL (Continued)

PAGE 1-B

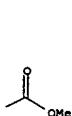


RN 167549-75-9 USPATFULL  
CN L-Phenylalanine,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-alpha.-glutamyl]-3-(methoxycarbonyl)-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



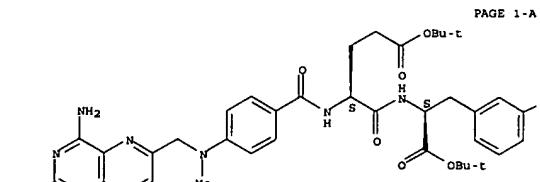
PAGE 1-A



RN 167549-76-0 USPATFULL  
CN L-Phenylalanine,  
N-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl-L.-alpha.-glutamyl-3-carboxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 16 OF 71 USPATFULL (Continued)

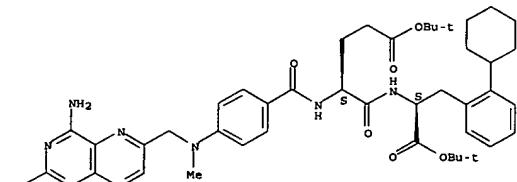


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RN 167550-05-2 USPATFULL  
CN L-Phenylalanine, 2-cyclohexyl-N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L.-alpha.-glutamyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

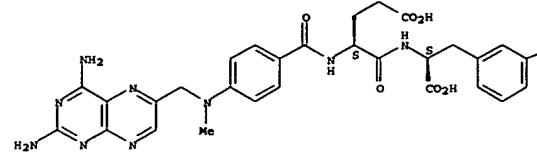


RN 167550-06-3 USPATFULL  
CN L-Phenylalanine,  
N-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl-L.-alpha.-glutamyl-2-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 16 OF 71 USPATFULL (Continued)

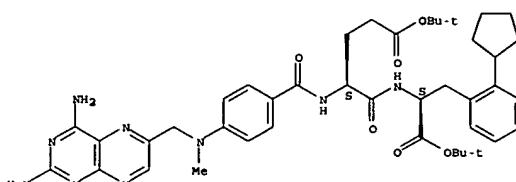
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RN 167549-86-2 USPATFULL  
CN L-Phenylalanine, 3-cyclopentyl-N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L.-alpha.-glutamyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

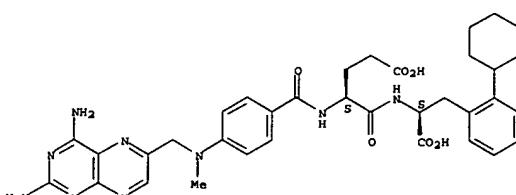
Absolute stereochemistry.



RN 167549-95-3 USPATFULL  
CN L-Phenylalanine, 3-cyclopentyl-N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L.-alpha.-glutamyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

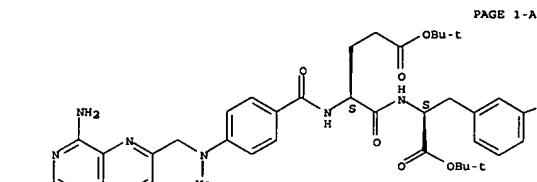
Absolute stereochemistry.

L24 ANSWER 16 OF 71 USPATFULL (Continued)



RN 167550-13-2 USPATFULL  
CN L-Phenylalanine,  
N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L.-alpha.-glutamyl]-3-(1,1-dimethylethyl)-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



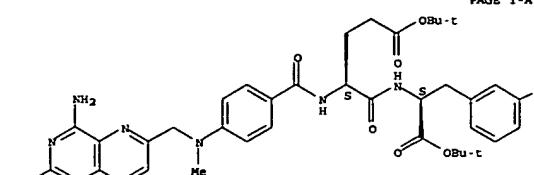
PAGE 1-B

RN 167550-26-7 USPATFULL  
CN L-Phenylalanine, 3-cyclobutyl-N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L.-alpha.-glutamyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 16 OF 71 USPATFULL (Continued)

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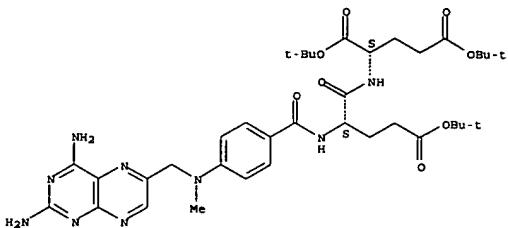


RN 167550-35-8 USPATFULL

CN L-Glutamic acid,

N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-alpha-glutamyl-tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



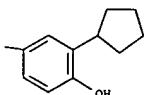
RN 167550-53-0 USPATFULL

CN L-Phenylalanine,

N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-alpha-glutamyl-tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

L24 ANSWER 16 OF 71 USPATFULL (Continued)

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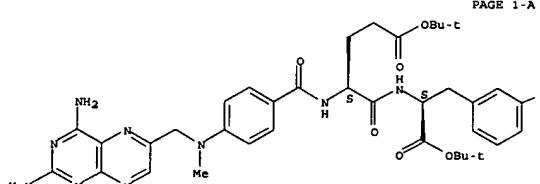


RN 167550-71-2 USPATFULL

CN L-Phenylalanine,

N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-alpha-glutamyl-3-(1-ethylpropyl)-bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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CH<sub>2</sub>Et<sub>2</sub>

RN 167550-72-3 USPATFULL

CN L-Phenylalanine,

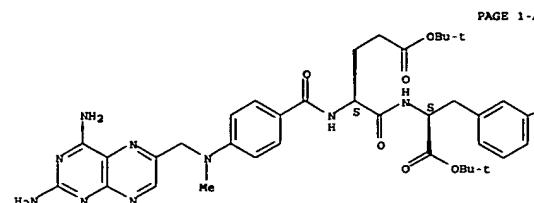
N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-alpha-glutamyl-3-(1-ethylpropyl)-bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 16 OF 71 USPATFULL (Continued)

N-((2,4-diamino-6-pteridinyl)-L-alpha-glutamyl)-3-(trimethylsilyl)-bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



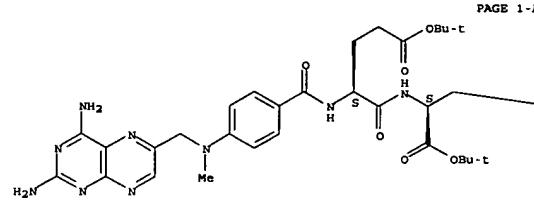
PAGE 1-B

SiMe<sub>3</sub>

RN 167550-60-9 USPATFULL

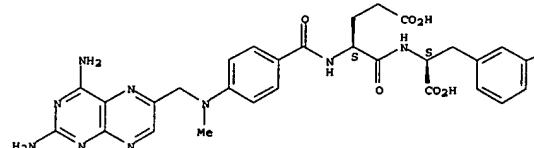
CN L-Tyrosine, 3-cyclopentyl-N-[N-[(2,4-diamino-6-pteridinyl)methylamino]benzoyl]-L-alpha-glutamyl-bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 16 OF 71 USPATFULL (Continued)

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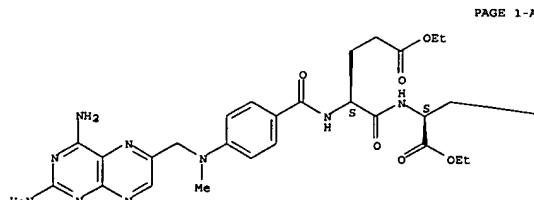
PAGE 1-B

CH<sub>2</sub>Et<sub>2</sub>

RN 167550-80-3 USPATFULL

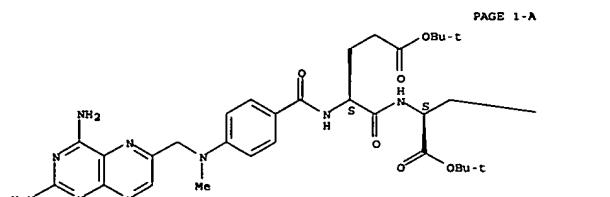
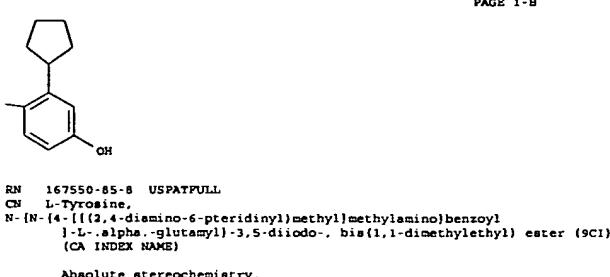
CN L-Tyrosine, 3-cyclopentyl-N-[N-[(2,4-diamino-6-pteridinyl)methylamino]benzoyl]-L-alpha-glutamyl-diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

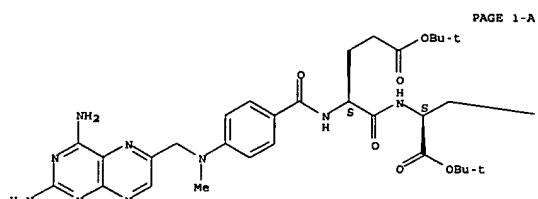


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L24 ANSWER 16 OF 71 USPATFULL (Continued)



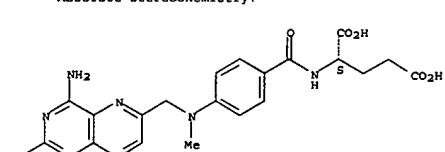
L24 ANSWER 16 OF 71 USPATFULL (Continued)



IT 59-05-2D9, Methotrexate, derivs.  
(prodrugs; improvement of antibody-directed enzyme prodrug therapy  
(ADEPT))

RN 59-05-2 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
-yl]- (9CI) (CA INDEX NAME)

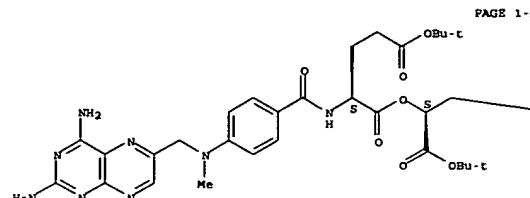
Absolute stereochemistry.



L24 ANSWER 16 OF 71 USPATFULL (Continued)

RN 167550-97-2 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
-yl]-. 1-(1-(3-cyclopentyl-4-hydroxyphenyl)methyl)-2-(1,1-  
dimethylethoxy)-2-oxoethyl 5-(1,1-dimethylethyl) ester, (S)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 17 OF 71 USPATFULL

ACCESSION NUMBER: 2001173161 USPATFULL  
TITLE: Multi-vitamin and mineral supplement  
INVENTOR(S): Cooper, Kenneth H., Dallas, TX, United States  
Jialal, Ishwarlal, Dallas, TX, United States  
Grundy, Scott Montgomery, Dallas, TX, United States  
Willett, Walter Churchill, Cambridge, MA, United States

States

Selhub, Jacob, Brookline, MA, United States  
Cooper Concepts, Inc., Dallas, TX, United States (U.S. corporation)

NUMBER	KIND	DATE
US 6299896	B1	20011009
US 2000-548515		20000413 (9)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Page, Thurman K.	
ASSISTANT EXAMINER:	Pulliam, Amy E	
LEGAL REPRESENTATIVE:	Arter & Hadden LLP	
NUMBER OF CLAIMS:	42	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1262	

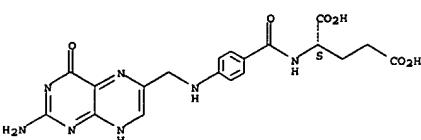
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is directed to a multi-vitamin and mineral supplement tailored to men and post-menopausal women, pre-menopausal women, and athletes which supplies the right amount of the right micronutrients needed for the right time to assure adequate intake of micronutrients needed for disease prevention and protection against nutritional losses and deficiencies due to lifestyle factors and common inadequate dietary patterns. The multi-vitamin and mineral supplement is comprised of Vitamin A, Vitamin C, Vitamin D, Vitamin E, Vitamin K, Vitamin B1, Vitamin B2, niacinamide, vitamin B6, vitamin B12, biotin, pantothenic acid, iron, Iodine, magnesium, zinc, selenium, copper, chromium, potassium, choline, lycopene, and co-enzyme Q-10.

IT 59-05-2 Folic acid, biological studies  
(oral compns. for multi-vitamin and mineral supplements for men and women)

RN 59-30-3 USPATFULL  
CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-  
pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 18 OF 71 USPATFULL  
 ACCESSION NUMBER: 2001:158491 USPATFULL  
 TITLE: Folic acid derivatives  
 INVENTOR(S): Fuchs, Philip L., West Lafayette, IN, United States  
 Liao, Jin, West Lafayette, IN, United States  
 Lantrip, Douglas A., Lafayette, IN, United States  
 PATENT ASSIGNEE(S): Purdue Research Foundation, United States (U.S. corporation)

PATENT INFORMATION:		
NUMBER	KIND	DATE
US 6291673	B1	20010918
WO 9920626		19990429
APPLICATION INFO.:		
US 2000-529682		20000417 (9)
WO 1998-US21914		19981016
		20000417 PCT 371 date
		20000417 PCT 102(e) date

PRIORITY INFORMATION:	
NUMBER	DATE
US 1997-62009P	19971017 (60)
DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Ford, John M.
LEGAL REPRESENTATIVE:	Barnes & Thornburg
NUMBER OF CLAIMS:	2
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT:	1065

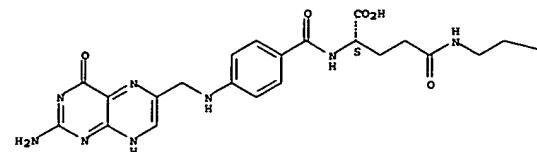
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel folic acid derivatives and their use in preparation of .gamma.-esters of folic acid via a pteroyl azide intermediate are described. Folic acid .gamma.-esters are useful intermediates in the synthesis of folic acid conjugates capable of binding folate receptors *in vitro* and *in vivo*.  
 IT 185130-29-4DP complexes with indium-111 (pteroyl azide intermediates in prepn. of folic acid-drug conjugates)  
 RN 185130-29-4 USPATFULL  
 CN 3,6,9,12,15-Pentaazecicosanedioic acid, 19-[{4-[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl}amino]-3,6,9-tris(carboxymethyl)-11,16-dioxo-, (19S)- (9CI) (CA INDEX NAME)

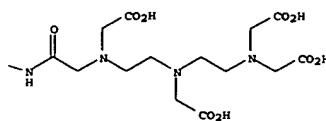
Absolute stereochemistry.

L24 ANSWER 18 OF 71 USPATFULL (Continued)

PAGE 1-A

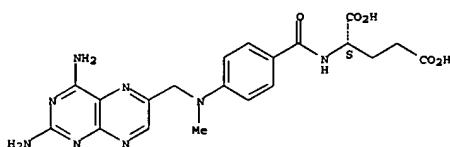


PAGE 1-B



IT 7532-09-4 (pteroyl azide intermediates in prepn. of folic acid-drug conjugates)  
 RN 7532-09-4 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



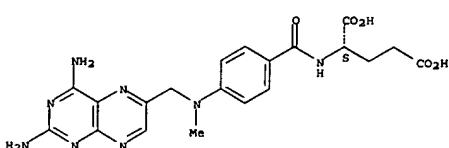
● Na

IT 59-05-2P, MTX 59-30-3P, Folic acid, preparation  
 197151-85-3P 197151-86-3P 197151-97-6P

L24 ANSWER 18 OF 71 USPATFULL (Continued)

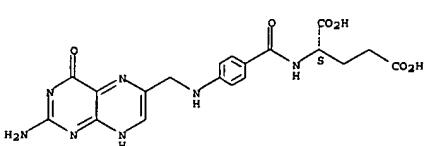
197152-02-6P (pteroyl azide intermediates in prepn. of folic acid-drug conjugates)  
 RN 59-05-2 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoylethyl-, (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl-, (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 197151-85-2 USPATFULL  
 CN L-Glutamine, N2-[{[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino}benzoyl]-N-(2-aminoethyl)- (9CI) (CA INDEX NAME)

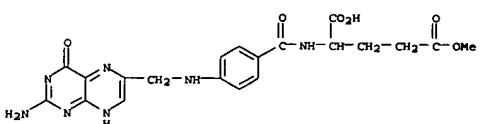
Absolute stereochemistry. Rotation (+).

L24 ANSWER 18 OF 71 USPATFULL (Continued)

PAGE 1-B

—NH<sub>2</sub>

RN 197151-86-3 USPATFULL  
 CN Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl-, 5-methyl ester (9CI) (CA INDEX NAME)

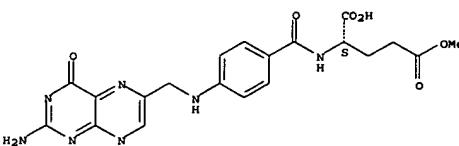


RN 197151-97-6 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl-, 5-methyl ester, compd. with N,N,N',N'-tetramethylguanidine (1:1) (9CI) (CA INDEX NAME)

CM 1

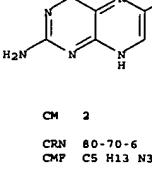
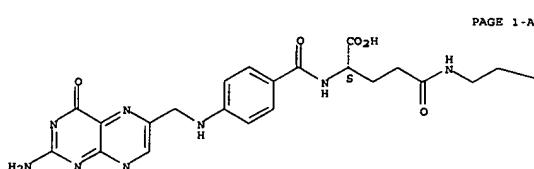
CRN 53464-60-1  
 CII C20 H21 N7 O6  
 CDES S:L

Absolute stereochemistry.

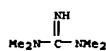


CM 2

CRN 60-70-6  
 CII C5 H13 N3

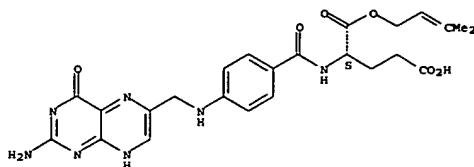


## L24 ANSWER 18 OF 71 USPATFULL (Continued)



RN 197152-02-6 USPATFULL  
CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl-, 1-(3-methyl-2-but enyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

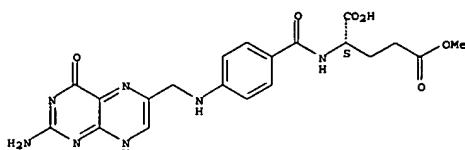


IT 53464-60-1P 65165-91-5P 65165-92-6P  
185130-29-4P 197151-90-3P 197151-91-0P  
197152-00-4P

(pteroyl azide intermediates in prepn. of folic acid-drug conjugates)

RN 53464-60-1 USPATFULL  
CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl-, 5-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

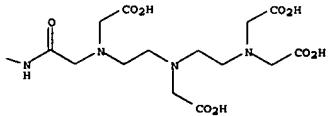


RN 65165-91-5 USPATFULL  
CN D-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

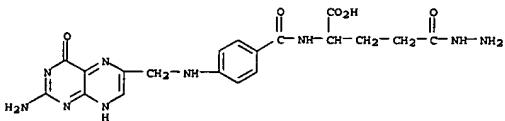
Absolute stereochemistry.

## L24 ANSWER 18 OF 71 USPATFULL (Continued)

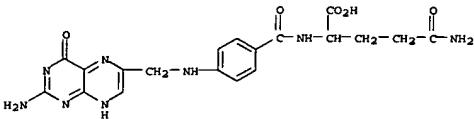
## PAGE 1-B



RN 197151-90-9 USPATFULL  
CN Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl-, 5-hydrazide (9CI) (CA INDEX NAME)



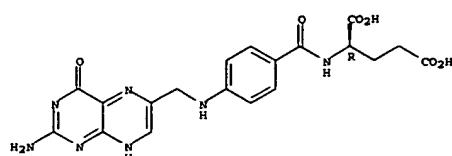
RN 197151-91-0 USPATFULL  
CN Glutamine, N2-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)



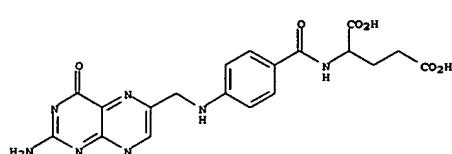
RN 197152-00-4 USPATFULL  
CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl-, 5-(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 18 OF 71 USPATFULL (Continued)



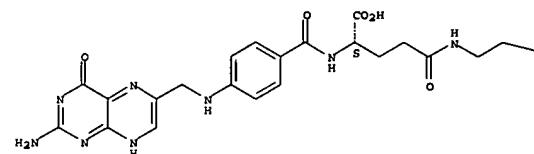
RN 65165-92-6 USPATFULL  
CN Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)



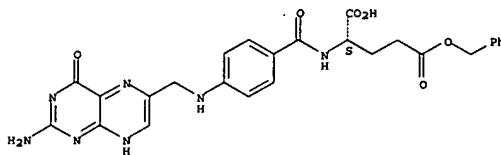
RN 185130-29-4 USPATFULL  
CN 3,6,9,12,15-Pentazaeicosedioic acid, 19-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]-3,6,9-tris(carboxymethyl)-11,16-dioxo-, (19S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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## L24 ANSWER 18 OF 71 USPATFULL (Continued)



L24 ANSWER 19 OF 71 USPATFULL  
 ACCESSION NUMBER: 2001116526 USPATFULL  
 TITLE: Targeted ultrasound contrast agents  
 INVENTOR(S): Klaveness, Jo, Oslo, Norway  
 Kongved, P.ang. l., Oslo, Norway  
 D.O. slashed.vhaug, Dagfinn, Oslo, Norway  
 PATENT ASSIGNEE(S): Mycomed Imaging AS, Oslo, Norway (non-U.S.  
 corporation)

NUMBER KIND DATE  
 PATENT INFORMATION: US 6264917 B1 20010724  
 APPLICATION INFO.: US 1997-958993 19971028 (8)

NUMBER DATE  
 PRIORITY INFORMATION: GB 1996-22366 19961028  
 GB 1996-22367 19961028  
 GB 1996-22368 19961028  
 GB 1997-699 19970115  
 GB 1997-8265 19970424  
 GB 1997-11842 19970606  
 GB 1997-11846 19970606  
 US 1997-49264P 19970607 (60)  
 US 1997-49268P 19970607 (60)

DOCUMENT TYPE: Utility  
 FILE SEGMENT: GRANTED  
 PRIMARY EXAMINER: Hartley, Michael G.  
 LEGAL REPRESENTATIVE: Bacon & Thomas  
 NUMBER OF CLAIMS: 17  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)  
 LINE COUNT: 5477

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Targetable diagnostic and/or therapeutically active agents, e.g. ultrasound contrast agents, having reporters comprising gas-filled microbubbles stabilised by monolayers of film-forming surfactants, the reporter being coupled or linked to at least one vector.

IT 195618-80-5P 207287-24-9P 350256-58-5P

(prepn. of diagnostic/therapeutic agents having phospholipid-based gas-filled microbubbles coupled to one or more vectors)

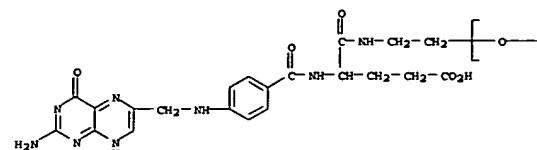
RN 195618-80-5 USPATFULL

CN Poly(oxy-1,2-ethanediyl),  
 .alpha.-[2-[(2S)-2-[(4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl]amino]-4-carboxy-1-

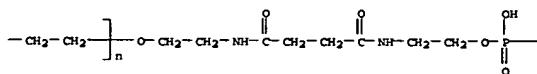
oxobutyl]amino]ethyl]-.omega.-[[12-hydroxy-12-oxido-4,7,18-trioxa-15-[(1-octadecyl)oxy]-11,13,17-trioxa-3,8-diaza-12-phosphapentatricont-1-yloxy]- (9CI) (CA INDEX NAME)

L24 ANSWER 19 OF 71 USPATFULL (Continued)

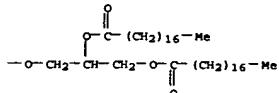
PAGE 1-A



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RN 207287-24-9 USPATFULL

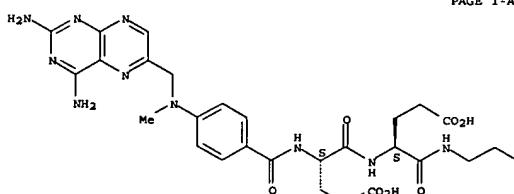
CN L-Cysteine,  
 N2,N6-bis[N-4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-.beta.-alanyl-L-lysyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

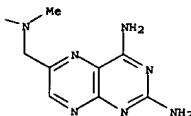
L24 ANSWER 19 OF 71 USPATFULL (Continued)

L24 ANSWER 19 OF 71 USPATFULL (Continued)

PAGE 1-A



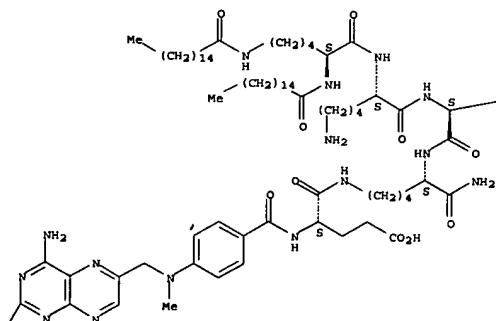
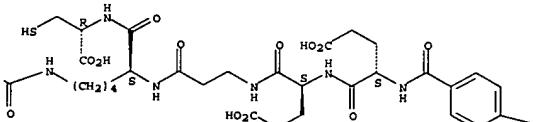
PAGE 1-B



RN 350256-58-5 USPATFULL  
 CN L-lysineamide, N2,N6-bis(1-oxohexadecyl)-L-lysyl-L-lysyl-N6-[N-4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl- (9CI) (CA INDEX NAME)

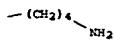
Absolute stereochemistry.

PAGE 1-A



L24 ANSWER 19 OF 71 USPATFULL (Continued)

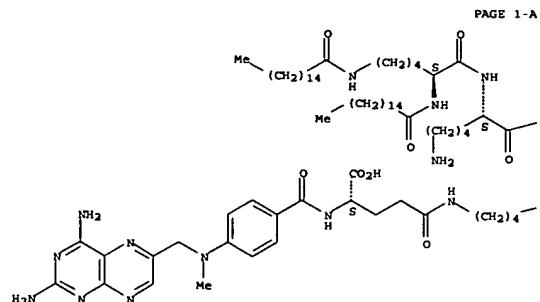
PAGE 1-B



PAGE 2-A

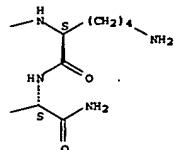
RN 350256-60-9 USPATFULL  
 CN L-Lysinamide, N2,N6-bis(1-oxohexadecyl)-L-lysyl-L-lysyl-N6-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.gamma.-glutamyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



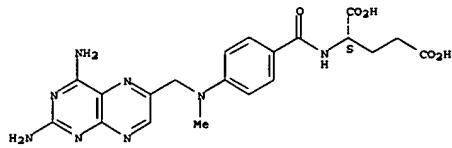
L24 ANSWER 19 OF 71 USPATFULL (Continued)

PAGE 1-B



IT 59-05-2, Methotrexate  
 (prepn. of diagnostic/therapeutic agents having phospholipid-based gas-filled microbubbles coupled to one or more vectors)  
 RN 59-05-2 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 20 OF 71 USPATFULL

ACCESSION NUMBER: 2001111808 USPATFULL  
 TITLE: Diagnostic/therapeutic agents having microbubbles

INVENTOR(S): Klaveness, Jo, Oslo, Norway  
 Rongved, P.ang.1, Oslo, Norway  
 H.o slashed.gast, Anders, Oslo, Norway  
 Tolleshaug, Helge, Oslo, Norway  
 N.ae butted.vested, Anne, Oslo, Norway  
 Heilebust, Hallids, Oslo, Norway  
 Hoff, Lars, Oslo, Norway  
 Cuthbertson, Alan, Oslo, Norway  
 L.o slashed.vhaug, Dagfinn, Oslo, Norway  
 Solbakk, Magne, Oslo, Norway

PATENT ASSIGNEE(S): Nycomed Imaging AS, Oslo, Norway (non-U.S. corporation)

NUMBER	KIND	DATE
US 6261537	B1	20010717
US 1997-960054		19971029 (8)
RELATED APPLN. INFO.:		Continuation-in-part of Ser. No. US 1997-958993, filed on 28 Oct 1997

PRIORITY INFORMATION:	NUMBER	DATE
GB 1996-22366	19961028	
GB 1996-22367	19961028	
GB 1996-22368	19961028	
GB 1997-699	19970115	
GB 1997-8265	19970424	
GB 1997-11842	19970606	
GB 1997-11846	19970606	
US 1997-49264P	19970607 (60)	
US 1997-49265P	19970607 (60)	
US 1997-49268P	19970607 (60)	

DOCUMENT TYPE: Utility  
 FILE SEGMENT: GRANTED  
 PRIMARY EXAMINER: Hartley, Michael G.  
 LEGAL REPRESENTATIVE: Bacon & Thomas, Fichter, Richard E.  
 NUMBER OF CLAIMS: 22  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)  
 LINE COUNT: 5614  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Targeted diagnostic and/or therapeutically active agents, e.g. ultrasound contrast agents, having reporters comprising gas-filled microbubbles stabilised by monolayers of film-forming surfactants, the reporter being coupled or linked to at least one vector.

IT 195618-80-5P 207287-24-9P 350256-58-5P

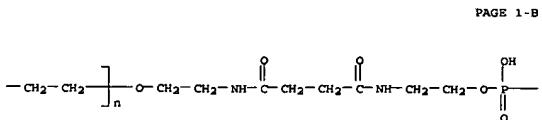
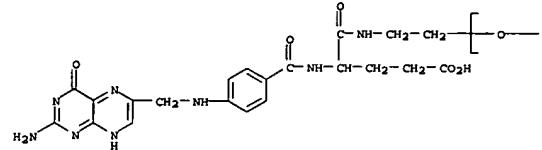
350256-60-9P  
 (prepn. of diagnostic/therapeutic agents having phospholipid-based gas-filled microbubbles coupled to one or more vectors)

RN 195618-80-5 USPATFULL

CN Poly(oxy-1,2-ethanediyl),  
 $\alpha,\alpha\text{-[2-[(2S)-2-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-4-carboxy-1-$   
 $\text{oxobutyl]amino}]\text{ethyl}-\text{omega-}[(12\text{-hydroxy-12-oxido-4,7,18-trioxa-15-[(1-$   
 $\text{oxooctadecyl)oxy-11,13,17-trioxa-3,8-diaza-12-phosphapentatriacont-1-$   
 $\text{yl)oxy-} (9CI) (CA INDEX NAME)$

L24 ANSWER 20 OF 71 USPATFULL (Continued)

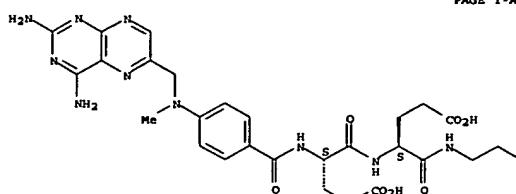
PAGE 1-A



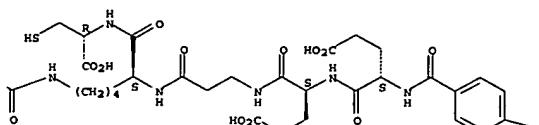
RN 207287-24-9 USPATFULL  
 CN L-Cysteine,  
 N2,N6-bis[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.alpha.-glutamyl-L-.alpha.-glutamyl-.beta.-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 20 OF 71 USPATFULL (Continued)

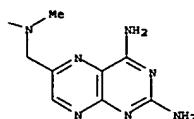


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L24 ANSWER 20 OF 71 USPATFULL (Continued)

PAGE 1-C



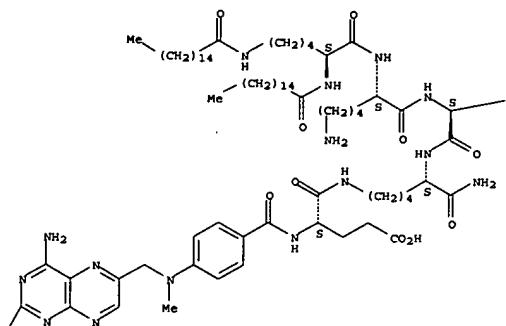
RN 350256-58-5 USPATFULL  
 CN L-Lysinamide, N2,N6-bis(1-oxohexadecyl)-L-lysyl-L-lysyl-N6-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.alpha.-glutamyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

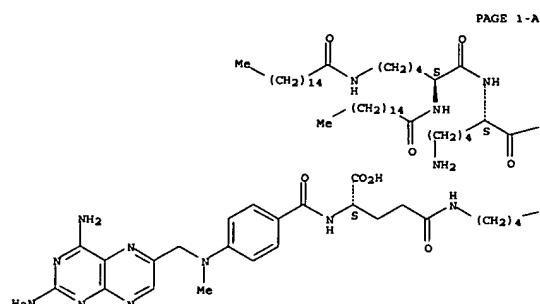
L24 ANSWER 20 OF 71 USPATFULL (Continued)

L24 ANSWER 20 OF 71 USPATFULL (Continued)

PAGE 1-A



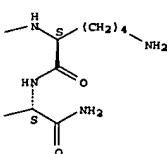
PAGE 1-B

 $-\text{CH}_2\text{CH}_2\text{NH}_2$ 

PAGE 1-B

PAGE 2-A

RN 350256-60-9 USPATFULL  
 CN L-Lysinamide, N2,N6-bis(1-oxohexadecyl)-L-lysyl-L-lysyl-N6-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.gamma.-glutamyl- (9CI) (CA INDEX NAME)

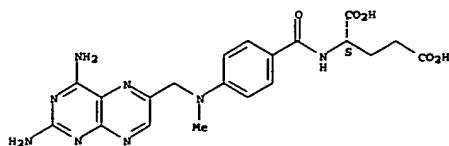


IT 59-05-2, Methotrexate  
 (prep. of diagnostic/therapeutic agents having phospholipid-based gas-filled microbubbles coupled to one or more vectors)

RN 59-05-2 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo- yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 20 OF 71 USPATFULL (Continued)



L24 ANSWER 21 OF 71 USPATFULL

ACCESSION NUMBER: 2001:59359 USPATFULL

TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications  
 INVENTOR(S): Wedeking, Paul W., Pennington, NJ, United States  
 Wager, Ruth E., Rockville, MD, United States  
 Arunachalam, Thangavel, Plainsboro, NJ, United States  
 Ramalingam, Kondareddiar, Dayton, NJ, United States  
 Linder, Karen E., Kingston, NJ, United States  
 Ranganathan, Ramachandran S., Princeton, NJ, United States  
 Nunn, Adrian D., Lambertville, NJ, United States  
 Raju, Natarajan, Kendall Park, NJ, United States  
 Tweedie, Michael P., Princeton, NJ, United States  
 Bracco Research USA, Inc., Princeton, NJ, United States  
 (U.S. corporation)

NUMBER	KIND	DATE
US 6221334	B1	20010424
US 2000-477072		20000103 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-80157, filed on 16 May 1998, now patented, Pat. No. US 6093382

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Jones, Damon L.  
 LEGAL REPRESENTATIVE: Balogh, Imre  
 NUMBER OF CLAIMS: 35  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 31 Drawing Figure(s); 31 Drawing Page(s)  
 LINE COUNT: 3407

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Diagnostic and therapeutic compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or bis isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.

IT 251084-37-4P 251084-40-9P 251084-43-2P

251084-49-8P 251084-50-1P 251084-51-2P

(prepn. and reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-37-4 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[4-[(4S)-4-

[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino

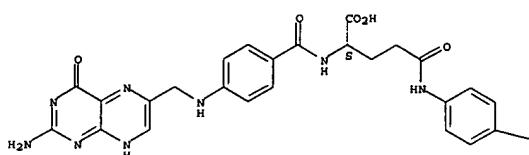
]-4-carboxy-1-oxobutyl]amino]phenyl]amino)-2-oxoethyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

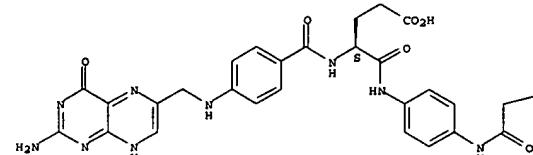
L24 ANSWER 21 OF 71 USPATFULL (Continued)

L24 ANSWER 21 OF 71 USPATFULL (Continued)

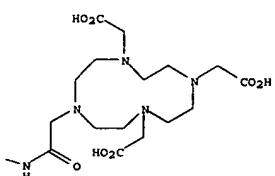
PAGE 1-A



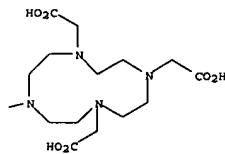
PAGE 1-A



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RN 251084-40-9 USPATFULL  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino)-2-oxoethyl] - (9CI) (CA INDEX NAME)

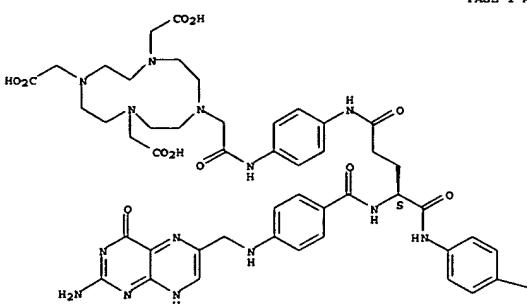
Absolute stereochemistry.

RN 251084-43-2 USPATFULL  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-[[((2S)-2-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl)amino]-1,5-dioxo-1,5-pentanediyil]bis(imino-4,1-phenyleneimino(2-oxo-2,1-ethanediyl))]bis - (9CI) (CA INDEX NAME)

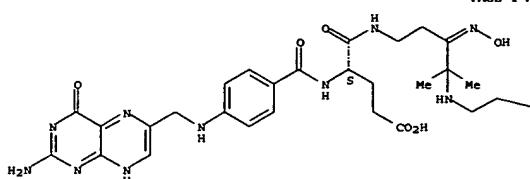
Absolute stereochemistry.

L24 ANSWER 21 OF 71 USPATFULL (Continued)

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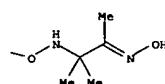
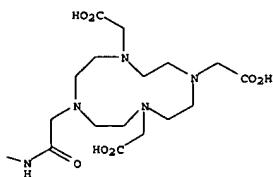
L24 ANSWER 21 OF 71 USPATFULL (Continued)  
oxo-6-pteridinyl)methyl]amino]benzoyl]amino)-2,10-bis(hydroxyimino)-  
3,3,9,9-tetramethyl-14-oxo-, (1SS)- (9CI) (CA INDEX NAME)Absolute stereochemistry.  
Double bond geometry unknown.

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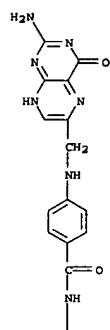
PAGE 1-B

PAGE 1-B

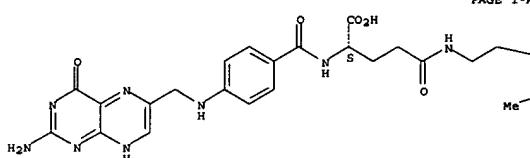
RN 251084-49-8 USPATFULL  
CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
15-[(4-[(2-amino-1,4-dihydro-4-RN 251084-49-8 USPATFULL  
CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
15-[(4-[(2-amino-1,4-dihydro-4-

L24 ANSWER 21 OF 71 USPATFULL (Continued)

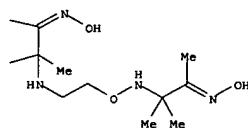
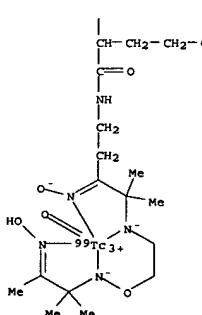
PAGE 1-A

L24 ANSWER 21 OF 71 USPATFULL (Continued)  
3,3,9,9-tetramethyl-14-oxo-, (17S)- (9CI) (CA INDEX NAME)Absolute stereochemistry.  
Double bond geometry unknown.

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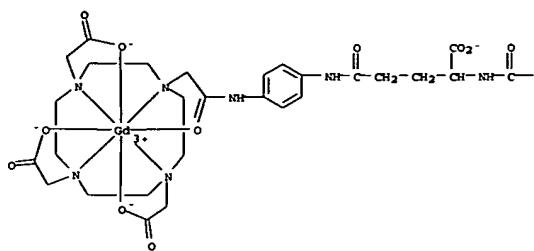


PAGE 1-B

IT 251084-38-5P 251084-39-6P 251084-41-0P  
251084-42-1P 251084-44-3P 251084-45-4P  
251084-52-3P  
(pref. for use in diagnostic and therapeutic applications)  
RN 251084-38-5 USPATFULL  
CN Gadolinate(1-), [10-[2-[(4-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino)-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-(oxo-.kappa.O)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(4-).kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7)-, sodium (9CI) (CA INDEX NAME)RN 251084-51-2 USPATFULL  
CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
17-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-2,10-bis(hydroxyimino)-

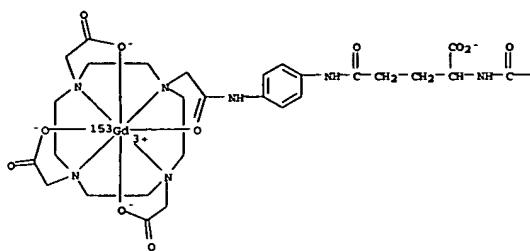
L24 ANSWER 21 OF 71 USPATFULL (Continued)

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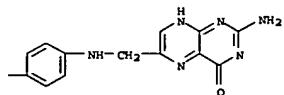
● Na<sup>+</sup>

L24 ANSWER 21 OF 71 USPATFULL (Continued)

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● Na<sup>+</sup>

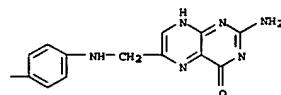
PAGE 1-B



RN 251084-39-6 USPATFULL

CN Gadolinate(1-)-153Gd, [10-[2-[[4-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino-2-(oxo-.kappa.O)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(4-)-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]-, sodium (9CI) (CA INDEX NAME)

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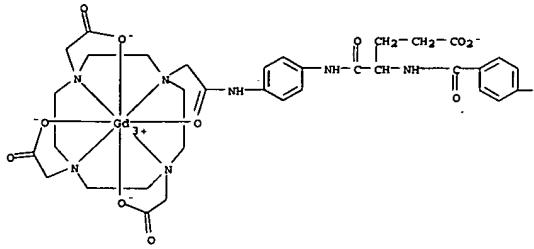
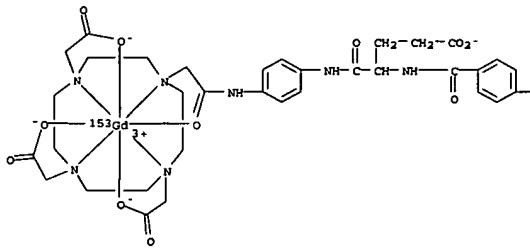
RN 251084-41-0 USPATFULL

CN Gadolinate(1-), [10-[2-[[4-[[2-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino-2-(oxo-.kappa.O)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(4-)-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]-, sodium (9CI) (CA INDEX NAME)

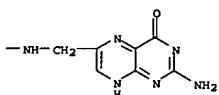
L24 ANSWER 21 OF 71 USPATFULL (Continued)

L24 ANSWER 21 OF 71 USPATFULL (Continued)

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● Na<sup>+</sup>● Na<sup>+</sup>

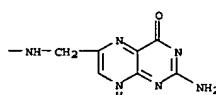
PAGE 1-B



RN 251084-42-1 USPATFULL

CN Gadolinate(1-)-153Gd, [10-[2-[[4-[[2-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino-2-(oxo-.kappa.O)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(4-)-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]-, sodium (9CI) (CA INDEX NAME)

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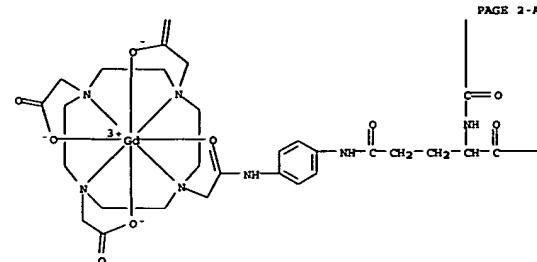
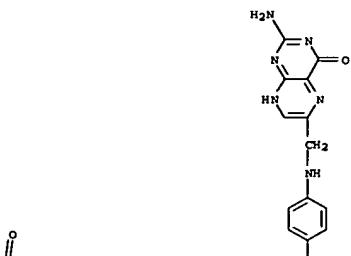
RN 251084-44-3 USPATFULL

CN Gadolinium, .mu.-[(10,10'-[[2-[[4-[[2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-1,5-dioxo-1,5-pentanediy]bis[imino-4,1-phenyleneimino][2-(oxo-.kappa.O)-2,1-ethanediyl]]bis[1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(6-)]di-, (9CI) (CA INDEX NAME)

L24 ANSWER 21 OF 71 USPATFULL (Continued)

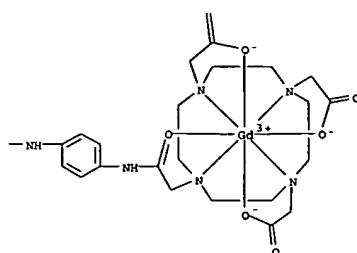
L24 ANSWER 21 OF 71 USPATFULL (Continued)

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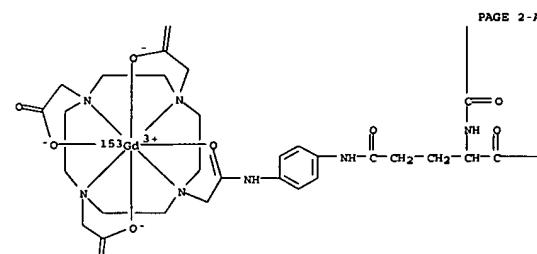
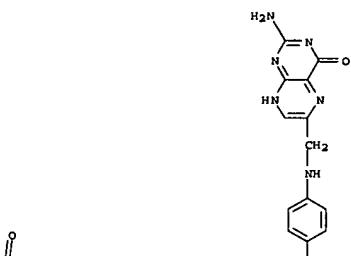
PAGE 2-B

RN 251084-45-4 USPATFULL  
CN Gadolinium-153Gd, [(mu-[[10,10'-[2-[4-[(2-amino-1,4-dihydro-4-oxo-6-ppteridinyl)methyl]amino]benzoyl]amino]-1,5-dioxo-1,5-pentanediyl]bis[mino-4,1-phenyleneimino]z-oxo-.kappa.O)-2,1-ethanediyl])bis[1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7)-(6-)]di- (9CI) (CA INDEX NAME)

L24 ANSWER 21 OF 71 USPATFULL (Continued)

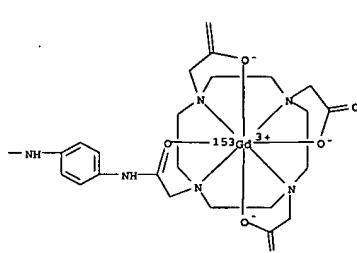
L24 ANSWER 21 OF 71 USPATFULL (Continued)

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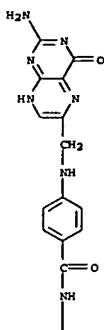


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RN 251084-52-3 USPATFULL  
CN Technetate(1-)-99Tc, [(2S)-2-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-9,17-bis(hydroxyimino-.kappa.N)-10,10,16,16-tetramethyl-5-oxo-14-oxa-6,11,15-triazaoctadecanoato(4-)-,hydrogen, (SP-5-15) (9CI) (CA INDEX NAME)

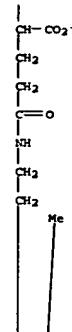
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L24 ANSWER 21 OF 71 USPATFULL (Continued)

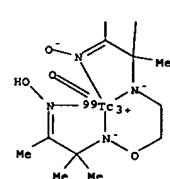


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L24 ANSWER 21 OF 71 USPATFULL (Continued)



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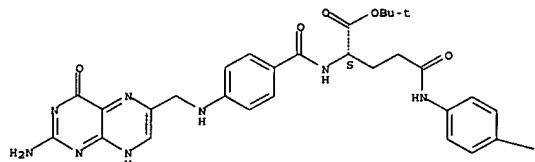
PAGE 3-A

IT 251084-56-7P 251084-60-3P 251084-64-7P  
 251084-76-1P 251084-80-7P  
 (reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)  
 RN 251084-56-7 USPATFULL  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[(4S)-4-

L24 ANSWER 21 OF 71 USPATFULL (Continued)

[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino-  
 -5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino[phenyl]amino]-2-oxoethyl]-  
 , triis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

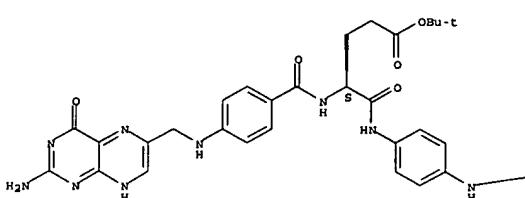
Absolute stereochemistry.



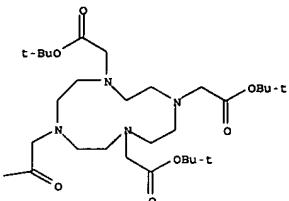
PAGE 1-A

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RN 251084-64-7 USPATFULL  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-[[(2S)-2-[(4-  
 [(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-  
 1,5-dioxo-1,5-pentanediyil]bis[imino-4,1-phenyleneimino(2-oxo-2,-  
 ethanediyil)]bis-, hexakis(1,1-dimethylethyl) ester (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.

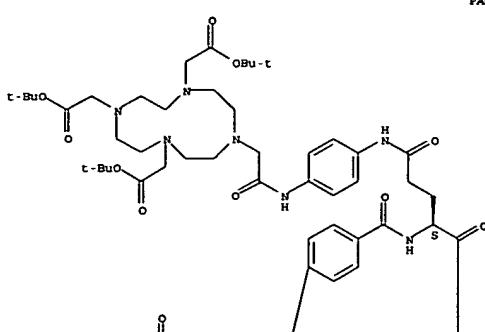
RN 251084-60-3 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[(2S)-2-

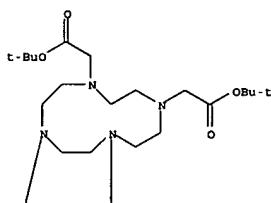
[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino-  
 -5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino[phenyl]amino]-2-oxoethyl]-  
 , triis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 21 OF 71 USPATFULL (Continued)



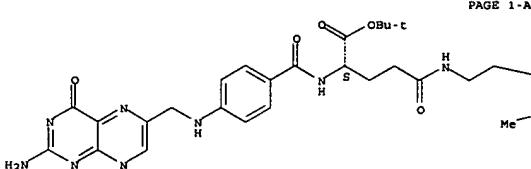
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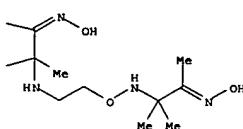
L24 ANSWER 21 OF 71 USPATFULL (Continued)

CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
17-[(4-[(2-amino-1,4-dihydro-4-  
oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-2,10-bis(hydroxyimino)-  
3,3,9,9-tetramethyl-14-oxo-, 1,1-dimethylethyl ester, (17S)- (9CI) (CA  
INDEX NAME)

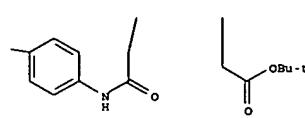
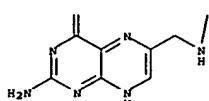
Absolute stereochemistry.  
Double bond geometry unknown.



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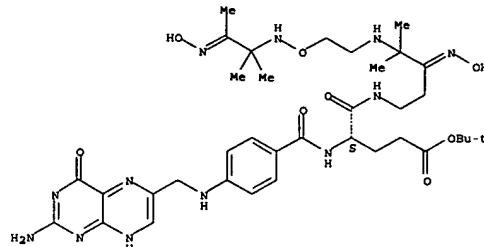


L24 ANSWER 21 OF 71 USPATFULL (Continued)



RN 251084-76-1 USPATFULL  
CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
15-[(4-[(2-amino-1,4-dihydro-4-  
oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-2,10-bis(hydroxyimino)-  
3,3,9,9-tetramethyl-14-oxo-, 1,1-dimethylethyl ester, (17S)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



RN 251084-80-7 USPATFULL

L24 ANSWER 22 OF 71 USPATFULL  
ACCESSION NUMBER: 2001/55490 USPATFULL  
TITLE: Polyester analogue of poly-L-lysine as a soluble, biodegradable gene delivery carrier  
INVENTOR(S): Park, Jong Sang, Seoul, Korea, Republic of  
Choi, Young Hun, Seoul, Korea, Republic of  
Kim, Sung Wan, Salt Lake City, UT, United States  
PATENT ASSIGNEE(S): Expression Genetics, Inc., Salt Lake City, UT, United States (U.S. corporation)

NUMBER	KIND	DATE
US 6217912	B1	20010417
US 1999-352473		19990713 (9)

NUMBER	DATE
US 1998-92682P	19980713 (60)

PRIORITY INFORMATION:  
DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Brusce, John S.  
ASSISTANT EXAMINER: Shibuya, Mark L.  
LEGAL REPRESENTATIVE: Thorpe North & Western, LLP  
NUMBER OF CLAIMS: 41  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 22 Drawing Figure(s); 7 Drawing Page(s)  
LINE COUNT: 841  
CAMS INDEXING IS AVAILABLE FOR THIS PATENT.

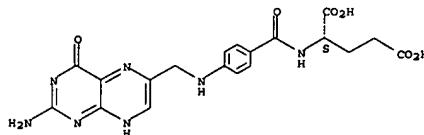
AB Poly(.alpha.-t-butyl-L-glycolic acid) (PAGA) is disclosed as a biodegradable composition suitable for delivering a gene into a cell. Methods of making and using PAGA are also disclosed.

IT 59-30-3, Polic acid, biological studies  
(targeting of; polyester analog of poly-L-lysine as a sol., biodegradable gene delivery carrier)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



## L24 ANSWER 23 OF 71 USPATFULL

ACCESSION NUMBER: 200143748 USPATFULL  
 TITLE: Dosage forms for the treatment of the chronic  
 glaucomas  
 INVENTOR(S): Richardson, Kenneth T., Anchorage, AK, United States  
 Pearson, Don C., Lakewood, WA, United States  
 PATENT ASSIGNEE(S): ChronoRx, LLC, Anchorage, AK, United States (U.S.  
 corporation)

NUMBER	KIND	DATE
US 6207190	B1	20010327
US 1999-372362		19990811 (9)

NUMBER	DATE
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PRIORITY INFORMATION: US 1998-96658P 19980813 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Spear, James M.

LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP

NUMBER OF CLAIMS: 56

EXEMPLARY CLAIM: 1

LINE COUNT: 1808

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Four interdependent functional groups of biofactors and biomolecules

are identified and formulations are defined which are comprised of their members. The active agents are demonstrated to be complementary in

their physiological functions especially as these relate to endothelial biochemistry and physiology, hyperinsulinemia and, ultimately, to vascular health. The active components of the invention are selected

for inclusion in precise combinations that reduce a variety of risks of vasculopathy in addition to reducing intraocular pressure. Widespread systemic improvement associated with local, optic nerve betterment of vascular health, reduces the risk of optic nerve atrophy with its accompanying visual field loss and potential blindness. The reduction

of this maximizes the potential clinical therapeutic success of current medical, IOP-lowering, anti-glaucoma medications.

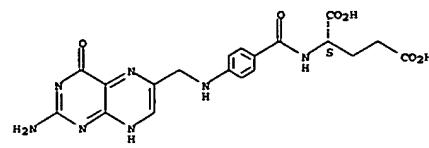
IT 59-30-3, Folic acid, biological studies  
 (oral dosage forms contg. amino acids, trace elements and vitamins for treatment of chronic glaucoma)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 23 OF 71 USPATFULL (Continued)



## L24 ANSWER 24 OF 71 USPATFULL

ACCESSION NUMBER: 200143711 USPATFULL

TITLE: Antigen binding fragments that specifically detect cancer cells, nucleotides encoding the fragments, and use thereof for the prophylaxis and detection of cancers

INVENTOR(S): Dan, Michael D., Scarborough, Canada  
 Maiti, Pradip K., Winnipeg, Canada  
 Kaplan, Howard A., Winnipeg, Canada

PATENT ASSIGNEE(S): Viventis Biotech, Inc., Toronto, Canada (non-U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 6207153 B1 20010327

APPLICATION INFO.: US 1997-862124 19970522 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-657449, filed on 22 May 1996, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Bansal, Geetha P.

LEGAL REPRESENTATIVE: Frommer Lawrence & Haug LLP

NUMBER OF CLAIMS: 35

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 26 Drawing Figure(s); 14 Drawing Page(s)

LINE COUNT: 3359

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to monoclonal antibody H11 and antigen binding fragments that specifically bind to the antigen recognized by H11, the C-antigen. The C-antigen is found specifically on neoplastic cells and not on normal cells. Also disclosed are polynucleotides and polypeptide derivatives based on H11, including single chain V region molecules and fusion proteins, and various pharmaceutical compositions. When administered to an individual, the H11 antibody is effective in diagnosing, localizing, and/or treating neoplasias. The invention further provides methods for treating a neoplastic disease,

particularly melanoma, neuroblastoma, glioma, soft tissue sarcoma, and small cell lung carcinoma. Patients who are in remission as a result of

traditional modes of cancer therapy may be treated with a composition of this invention in hopes of reducing the risk of recurrence. Patients may also be treated concurrently with the antibodies and traditional anti-neoplastic agents.

IT 59-05-2D, Methotrexate, conjugates  
 (with antibody constructs targeting C-antigen of tumors)

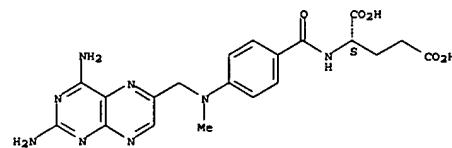
RN 59-05-2 USPATFULL

CN L-Glutamic acid,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 24 OF 71 USPATFULL (Continued)



## L24 ANSWER 25 OF 71 USPATFULL

ACCESSION NUMBER: 2000:164081 USPATFULL  
 TITLE: Tissue factor methods and compositions for coagulation and tumor treatment  
 INVENTOR(S): Thorpe, Philip E., Dallas, TX, United States  
 King, Steven W., Foothill Ranch, CA, United States  
 Gao, Boning, Dallas, TX, United States  
 PATENT ASSIGNEE(S): Board Of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)

NUMBER	KIND	DATE
US 6156321		20001205
US 1998-9822		19980120 (9)

NUMBER	DATE
US 1997-42427P	19970327 (60)
US 1997-36205P	19970127 (60)
US 1997-35920P	19970122 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Bansal, Geetha P.

LEGAL REPRESENTATIVE: Williams, Morgan and Amerson

NUMBER OF CLAIMS: 47

EXEMPLARY CLAIM: 1,3

NUMBER OF DRAWINGS: 25 Drawing Figure(s); 15 Drawing Page(s)

LINE COUNT: 7500

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

**AB** The invention embodies the surprising discovery that Tissue Factor (TF) compositions and variants thereof specifically localize to the blood vessels within a vascularized tumor following systemic administration. The invention therefore provides methods and compositions comprising coagulant-deficient Tissue Factor for use in effecting specific coagulation and for use in tumor treatment. The TF compositions and methods of present invention may be used alone, as TF conjugates with improved half-life, or in combination with other agents, such as conventional chemotherapeutic drugs, targeted immunotoxins, targeted coagulants, and/or in combination with Factor VIIa (FVIIa) or FVIIa activators.

**IT** 59-05-2, Methotrexate  
 (tissue factor methods and compns. for targeted coagulation and tumor treatment)

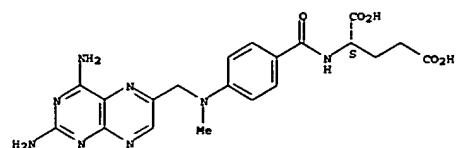
RN 59-05-2 USPATFULL

CN L-Glutamic acid,

N-[4-([(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 25 OF 71 USPATFULL (Continued)



## L24 ANSWER 26 OF 71 USPATFULL

ACCESSION NUMBER: 2000:146146 USPATFULL  
 TITLE: Cell-targeting molecule comprising a mutant human carboxypeptidase A  
 INVENTOR(S): Smith, Gary Keith, Raleigh, NC, United States  
 Blumenkopf, Todd Andrew, Old Lyme, CT, United States  
 Cory, Michael, Chapel Hill, NC, United States  
 PATENT ASSIGNEE(S): Glaxo Wellcome Inc., Research Triangle Park, NC, United States (U.S. corporation)

NUMBER	KIND	DATE
US 6140100		200001031
WO 9513095		19950518

APPLICATION INFO.: US 1996-640906	19960509 (8)
WO 1994-B2483	19941111
	19960509 PCT 371 date
	19960509 PCT 102(e) date

NUMBER	DATE
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PRIORITY INFORMATION: GB 1993-23429	19931112
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DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Achutamurthy, Pennathapura

ASSISTANT EXAMINER: Moore, William N.

LEGAL REPRESENTATIVE: Grassler, Frank P., Bennett, Virginia C., Krubie, Robert T.

NUMBER OF CLAIMS: 13

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 7 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT: 7473

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

**AB** Conjugates of a cell targeting molecule and a mutant human carboxypeptidase A enzyme are provided. Suitable targeting molecules include antibodies, hormones, ligands, cytokines, antigens, oligonucleotides and peptidomimetics. Enzymes comprising a mutant human carboxypeptidase A enzyme are also provided.

**IT** 167549-87-3P 167549-96-4P 167550-14-3P  
 167550-27-8P 167550-54-1P 167550-61-0P  
 167550-81-4P 167550-86-9P 167550-98-3P  
 167551-08-8P

(Improvement of antibody-directed enzyme prodrug therapy (ADEPT))

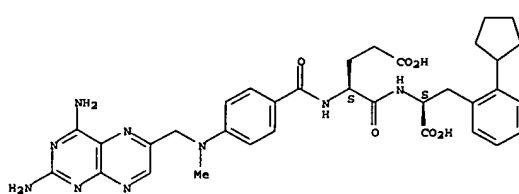
RN 167549-87-3 USPATFULL

CN L-Phenylalanine,

N-[4-([(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]-L-.alpha.-glutamyl-2-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 26 OF 71 USPATFULL (Continued)



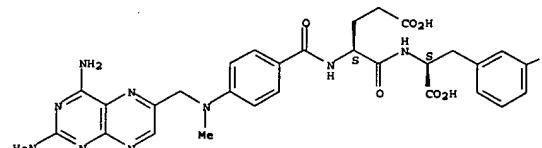
RN 167549-96-4 USPATFULL

CN L-Phenylalanine,

N-[4-([(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]-L-.alpha.-glutamyl-3-(1-dimethyl ethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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RN 167550-14-3 USPATFULL

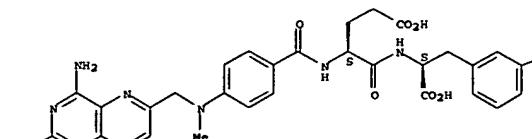
CN L-Phenylalanine,

N-[4-([(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]-L-.alpha.-glutamyl-3-(1-dimethyl ethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 26 OF 71 USPATFULL (Continued)

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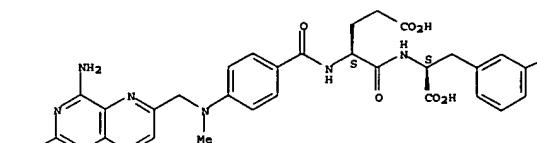
PAGE 1-B

Bu-t

RN 167550-27-8 USPATFULL  
 CN L-Phenylalanine,  
 N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
 yl-L-.alpha.-glutamyl-3-cyclobutyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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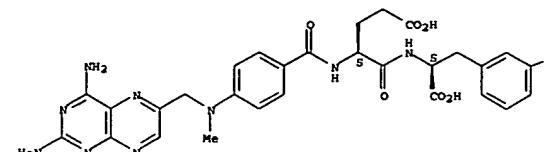
SiMe3

L24 ANSWER 26 OF 71 USPATFULL (Continued)

RN 167550-54-1 USPATFULL  
 CN L-Phenylalanine,  
 N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
 yl-L-.alpha.-glutamyl-3-(trimethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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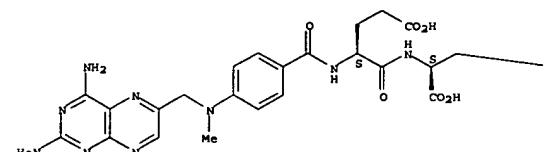
PAGE 1-B

SiMe3

RN 167550-61-0 USPATFULL  
 CN L-Tyrosine,  
 N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-  
 .alpha.-glutamyl-3-cyclopentyl- (9CI) (CA INDEX NAME)

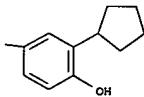
Absolute stereochemistry.

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L24 ANSWER 26 OF 71 USPATFULL (Continued)

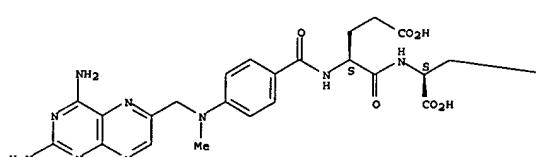
PAGE 1-B



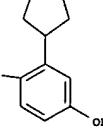
RN 167550-81-4 USPATFULL  
 CN L-Tyrosine,  
 N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-  
 .alpha.-glutamyl-2-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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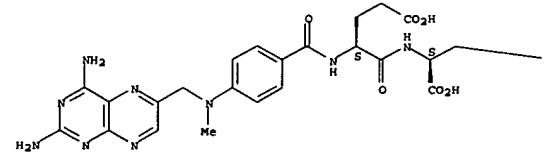


RN 167550-86-9 USPATFULL  
 CN L-Tyrosine,  
 N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-  
 .alpha.-glutamyl-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 26 OF 71 USPATFULL (Continued)

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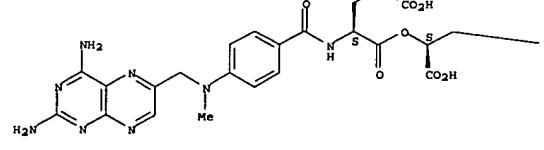


PAGE 1-B

RN 167550-98-3 USPATFULL  
 CN D-glutamic acid,  
 N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
 yl-L-1-[1-carboxy-2-(3-cyclopentyl-4-hydroxyphenyl)ethyl] ester, (S)-  
 (9CI) (CA INDEX NAME)

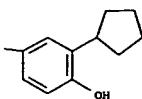
Absolute stereochemistry.

PAGE 1-A



L24 ANSWER 26 OF 71 USPATFULL (Continued)

PAGE 1-B

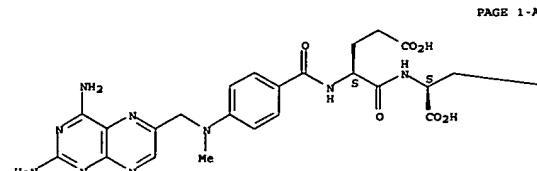


RN 167551-08-8 USPATFULL

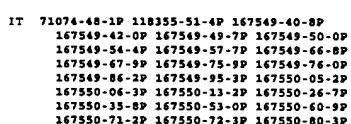
CN L-Tyrosine,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-alpha.-glutamyl-3-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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IT 71074-48-1P 118355-51-4P 167549-40-8P  
167549-42-0P 167549-49-7P 167549-50-0P  
167549-54-4P 167549-57-7P 167549-66-8P  
167549-67-9P 167549-75-9P 167549-76-0P  
167549-86-2P 167549-95-3P 167550-05-2P  
167550-06-3P 167550-13-2P 167550-26-7P  
167550-35-8P 167550-53-0P 167550-60-9P  
167550-73-2P 167550-72-3P 167550-80-3P

L24 ANSWER 26 OF 71 USPATFULL (Continued)

167550-85-8P 167550-97-2P 167551-07-7P

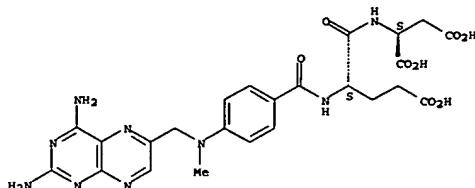
(Improvement of antibody-directed enzyme prodrug therapy (ADEPT))

RN 71074-48-1 USPATFULL

CN L-Aspartic acid,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo-  
yl-L-alpha.-glutamyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

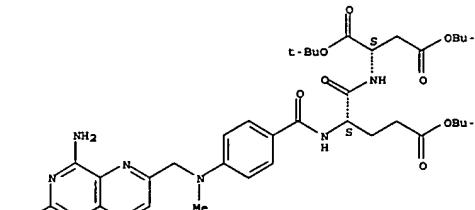


RN 118355-51-4 USPATFULL

CN L-Aspartic acid,

N-[N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]be-  
nzoyl]-L-alpha.-glutamyl-, triis(1,1-dimethylethyl) ester (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



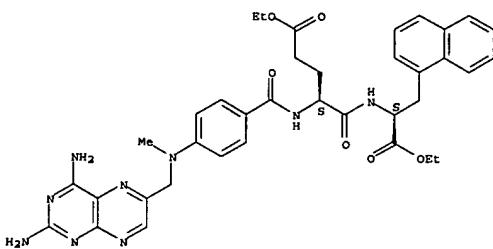
RN 167549-40-8 USPATFULL

CN L-Alanine,

N-[N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-  
L-alpha.-glutamyl-3-(1-naphthalenyl)-, diethyl ester (9CI) (CA INDEX  
NAME)

L24 ANSWER 26 OF 71 USPATFULL (Continued)

Absolute stereochemistry.

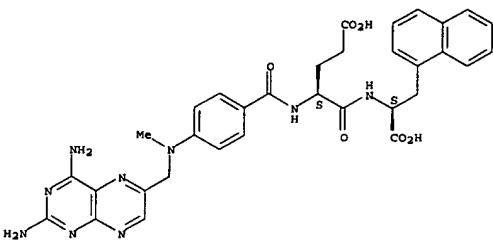


RN 167549-42-0 USPATFULL

CN L-Alanine,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-  
.alpha.-glutamyl-3-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167549-49-7 USPATFULL

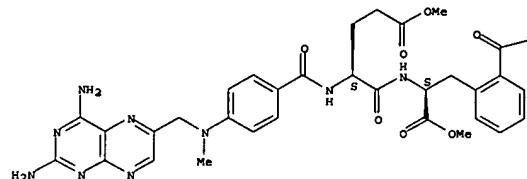
CN L-Phenylalanine,

N-[N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]be-  
nzoyl]-L-alpha.-glutamyl-2-(methoxycarbonyl)-, dimethyl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 26 OF 71 USPATFULL (Continued)

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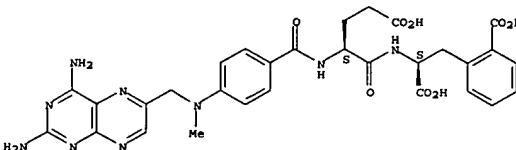
—OMe

RN 167549-50-0 USPATFULL

CN L-Phenylalanine,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo-  
yl-L-alpha.-glutamyl-2-carboxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



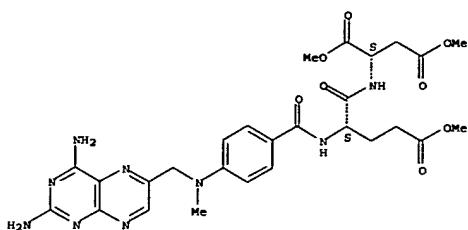
RN 167549-54-4 USPATFULL

CN L-Aspartic acid,

N-[N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]be-  
nzoyl]-L-alpha.-glutamyl-, trimethyl ester (9CI) (CA INDEX NAME)

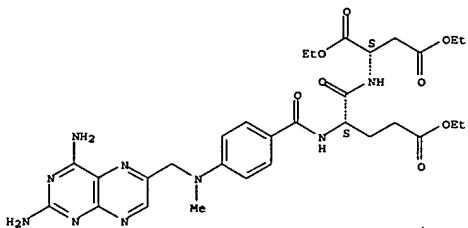
Absolute stereochemistry.

L24 ANSWER 26 OF 71 USPATFULL (Continued)



RN 167549-57-7 USPATFULL  
 CN L-Aspartic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-, triethyl ester (9CI) (CA INDEX NAME)

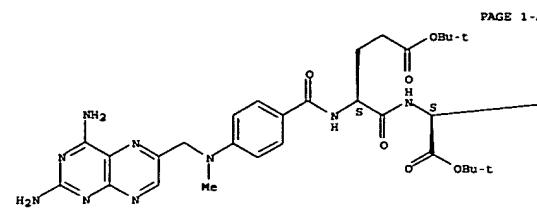
Absolute stereochemistry.



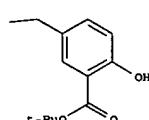
RN 167549-66-8 USPATFULL  
 CN L-Tyrosine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-3-((1,1-dimethylethoxy)carbonyl)-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 26 OF 71 USPATFULL (Continued)



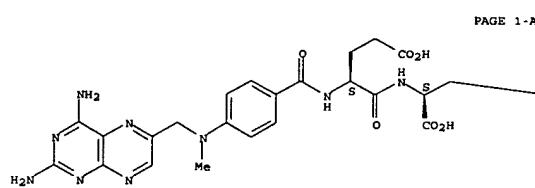
PAGE 1-B



RN 167549-67-9 USPATFULL  
 CN L-Tyrosine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-3-carboxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 26 OF 71 USPATFULL (Continued)



L24 ANSWER 26 OF 71 USPATFULL (Continued)

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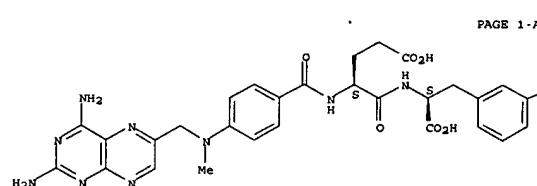


RN 167549-76-0 USPATFULL  
 CN L-Phenylalanine,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-3-carboxy- (9CI) (CA INDEX NAME)

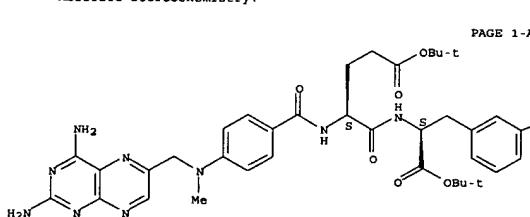
Absolute stereochemistry.

RN 167549-75-9 USPATFULL  
 CN L-Phenylalanine,  
 N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-3-(methoxycarbonyl)-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



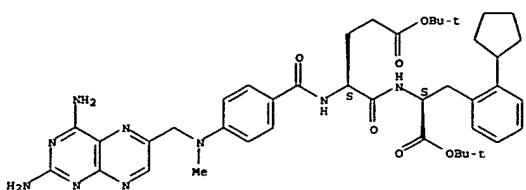
PAGE 1-B



RN 167549-86-2 USPATFULL  
 CN L-Phenylalanine, 2-cyclopentyl-N-[N-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl-L-.alpha.-glutamyl-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 26 OF 71 USPATFULL (Continued)

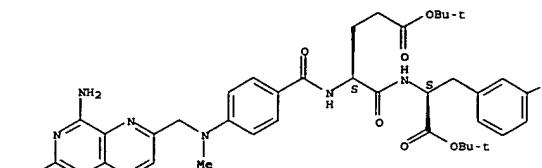


RN 167549-95-3 USPATFULL

CN L-Phenylalanine, 3-cyclopentyl-N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.alpha.-glutamyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B

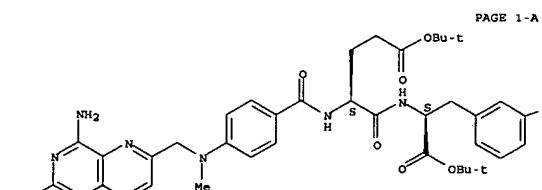


RN 167550-05-2 USPATFULL

CN L-Phenylalanine, 2-cyclohexyl-N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.alpha.-glutamyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 26 OF 71 USPATFULL (Continued)



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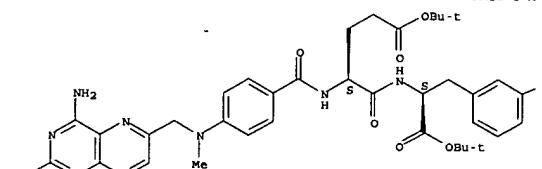
*t*-Bu-t

RN 167550-26-7 USPATFULL

CN L-Phenylalanine, 3-cyclobutyl-N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.alpha.-glutamyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

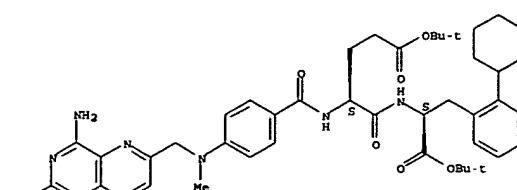
PAGE 1-A



PAGE 1-B

*t*-SiMe<sub>3</sub>

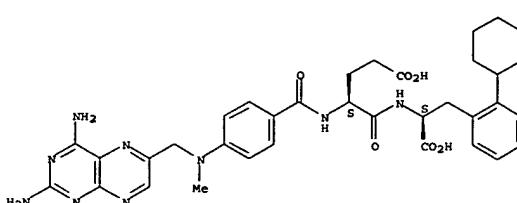
L24 ANSWER 26 OF 71 USPATFULL (Continued)



RN 167550-06-3 USPATFULL

CN L-Phenylalanine, N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-L-.alpha.-glutamyl-2-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167550-13-2 USPATFULL

CN L-Phenylalanine, N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.alpha.-glutamyl]-3-(1,1-dimethylethyl)-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

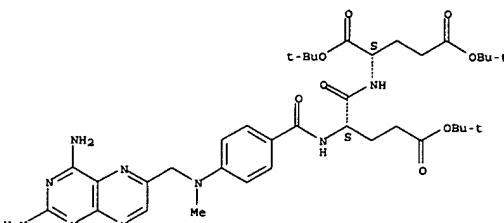
Absolute stereochemistry.

L24 ANSWER 26 OF 71 USPATFULL (Continued)

RN 167550-35-9 USPATFULL

CN L-Glutamic acid, N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.alpha.-glutamyl]-, tris(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

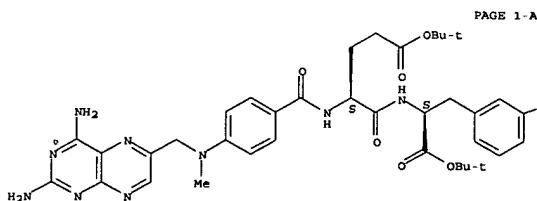
Absolute stereochemistry.



RN 167550-53-0 USPATFULL

CN L-Phenylalanine, N-[N-(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]-L-.alpha.-glutamyl]-3-(trimethylsilyl)-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



PAGE 1-B

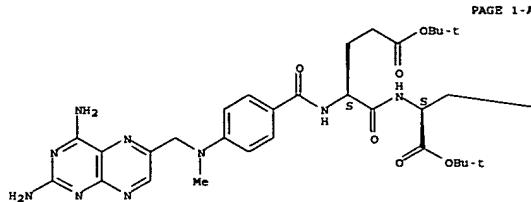
*t*-SiMe<sub>3</sub>

## L24 ANSWER 26 OF 71 USPATFULL (Continued)

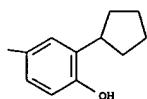
RN 167550-60-9 USPATFULL

CN L-Tyrosine, 3-cyclopentyl-N-[N-{4-[(2,4-diamino-6-pteridinyl)methyl]methylamino}benzoyl]-L-.alpha.-glutamyl-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



PAGE 1-B



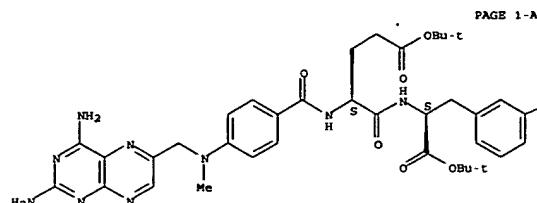
RN 167550-71-2 USPATFULL

CN L-Phenylalanine, N-[N-{4-[(2,4-diamino-6-pteridinyl)methyl]methylamino}benzoyl]-L-.alpha.-glutamyl-3-(1-ethylpropyl)-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 26 OF 71 USPATFULL (Continued)

PAGE 1-A



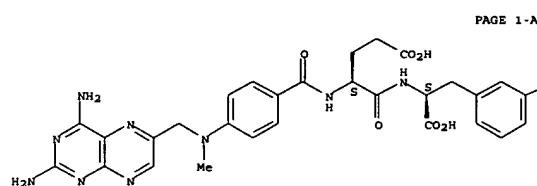
PAGE 1-B

CHEt<sub>2</sub>

RN 167550-72-3 USPATFULL

CN L-Phenylalanine, N-[N-{4-[(2,4-diamino-6-pteridinyl)methyl]methylamino}benzoyl]-L-.alpha.-glutamyl-3-(1-ethylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



## L24 ANSWER 26 OF 71 USPATFULL (Continued)

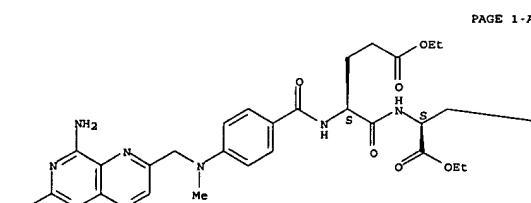
PAGE 1-B

CHEt<sub>2</sub>

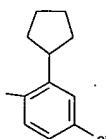
RN 167550-80-3 USPATFULL

CN L-Tyrosine, 2-cyclopentyl-N-[N-{4-[(2,4-diamino-6-pteridinyl)methyl]methylamino}benzoyl]-L-.alpha.-glutamyl-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



PAGE 1-B



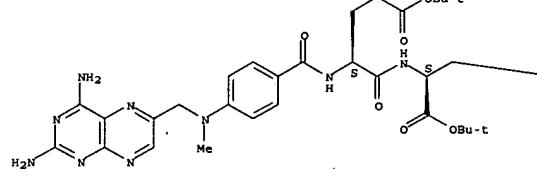
RN 167550-85-8 USPATFULL

CN L-Tyrosine, N-[N-{4-[(2,4-diamino-6-pteridinyl)methyl]methylamino}benzoyl]-L-.alpha.-glutamyl-3,5-diiodo-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

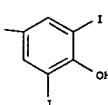
Absolute stereochemistry.

## L24 ANSWER 26 OF 71 USPATFULL (Continued)

PAGE 1-A

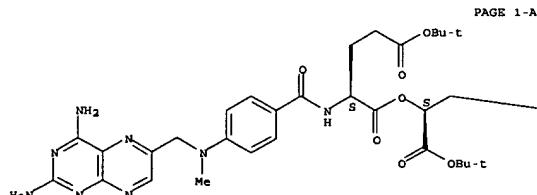


PAGE 1-B



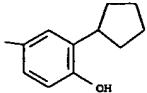
RN 167550-97-2 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo-  
ylyl-, 1-(1-[(3-cyclopentyl-1-4-hydroxyphenyl)methyl]-2-(1,1-  
dimethylethoxy)-2-oxoethyl)-5-(1,1-dimethylethyl) ester, (S)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



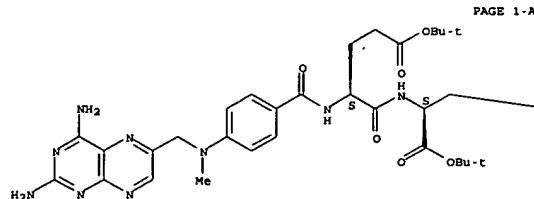
L24 ANSWER 26 OF 71 USPATFULL (Continued)

PAGE 1-B



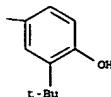
RN 167551-07-7 USPATFULL  
CN L-Tyrosine,  
N-[N-{4-[(2,4-diamino-6-pteridinyl)methyl]methylamino}benzoyl  
]-L-.alpha.-glutamyl]-3-(1,1-dimethylethyl)-, bis(1,1-dimethylethyl)  
ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



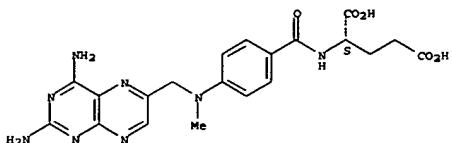
L24 ANSWER 26 OF 71 USPATFULL (Continued)

PAGE 1-B



IT 59-05-2DP, Methotrexate, derivs.  
(prodrugs; improvement of antibody-directed enzyme prodrug therapy  
(ADEPT))  
RN 59-05-2 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
yil]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 27 OF 71 USPATFULL  
ACCESSION NUMBER: 2000137819 USPATFULL  
TITLE: Combined tissue factor and chemotherapeutic methods  
and  
INVENTOR(S): Thorpe, Philip E., Dallas, TX, United States  
King, Steven W., Poochill Ranch, CA, United States  
Gao, Boning, Dallas, TX, United States  
PATENT ASSIGNEE(S): Board of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)

NUMBER	KIND	DATE
US 6132729	20001017	
US 1998-9217	19980120 (9)	

NUMBER	DATE
US 1997-42427P	19970327 (60)
US 1997-36205P	19970127 (60)
US 1997-35920P	19970122 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Bansal, Geetha P.  
LEGAL REPRESENTATIVE: Williams, Morgan & Amerson  
NUMBER OF CLAIMS: 46  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 25 Drawing Figure(s); 15 Drawing Page(s)  
LINE COUNT: 7498

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

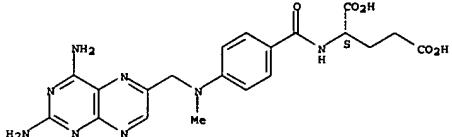
AB The invention embodies the surprising discovery that Tissue Factor (TF) compositions and variants thereof specifically localize to the blood vessels within a vascularized tumor following systemic administration. The invention therefore provides methods and compositions comprising coagulation-deficient Tissue Factor for use in effecting specific coagulation and for use in tumor treatment. The TF compositions and methods of present invention may be used alone, as TF conjugates with improved half-life, or in combination with other agents, such as conventional chemotherapeutic drugs, targeted immunotoxins, targeted coaguligands, and/or in combination with Factor VIIa (FVIIa) or FVII activators.

IT 59-05-2, Methotrexate  
(tissue factor methods and compns. for targeted coagulation and tumor treatment)

RN 59-05-2 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo  
yil]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 27 OF 71 USPATFULL (Continued)



## L24 ANSWER 28 OF 71 USPATFULL

ACCESSION NUMBER: 2000-94681 USPATFULL

**TITLE:** Metal complexes derivatized with folate for use in diagnostic and therapeutic applications  
**INVENTOR(S):** Wedeking, Paul W., Pennington, NJ, United States  
 Wager, Ruth E., Rockville, MD, United States  
 Arunachalam, Thangavel, Plainsboro, NJ, United States  
 Ramalingam, Komadreddiar, Dayton, NJ, United States  
 Linder, Karen E., Kingston, NJ, United States  
 Ranganathan, Ramachandran S., Princeton, NJ, United States  
 Nunn, Adrian D., Lambertville, NJ, United States  
 Raju, Natarajan, Kendall Park, NJ, United States  
 Tweedie, Michael P., Princeton, NJ, United States  
**PATENT ASSIGNEE(S):** Bracco Research USA Inc., Princeton, NJ, United States (U.S. corporation)

NUMBER	KIND	DATE
US 6093382	20000725	
US 1998-80157	19980516 (9)	

**PATENT INFORMATION:** DOCUMENT TYPE: Utility  
**FILE SEGMENT:** PRIMARY EXAMINER: Dees, Jose' G.  
**ASSISTANT EXAMINER:** Jones, Dameron  
**LEGAL REPRESENTATIVE:** Balogh, Imre  
**NUMBER OF CLAIMS:** 36  
**EXEMPLARY CLAIM:** 1  
**NUMBER OF DRAWINGS:** 8 Drawing Figure(s); 8 Drawing Page(s)  
**LINE COUNT:** 3756

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

**AB** Diagnostic and therapeutic compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or bio isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.

IT 251084-37-4P 251084-40-9P 251084-43-2P

251084-49-8P 251084-50-1P 251084-51-2P  
 (prepn. and reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-37-4 USPATFULL

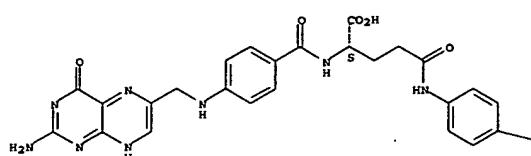
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[[4-

[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-4-carboxy-1-oxobutylaminophenylamino]-2-oxoethyl]-(9CI) (CA INDEX NAME)

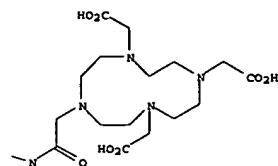
Absolute stereochemistry.

## L24 ANSWER 28 OF 71 USPATFULL (Continued)

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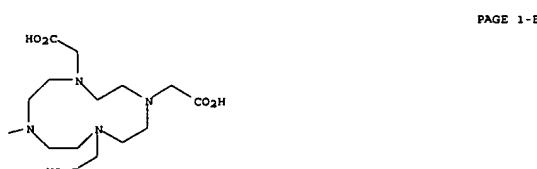
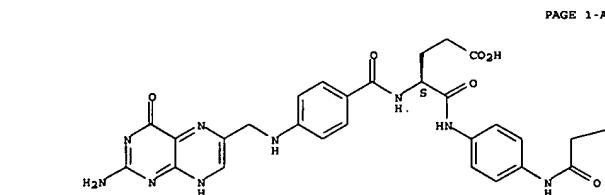


RN 251084-40-9 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-4-carboxy-1-oxobutylaminophenylamino]-2-oxoethyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 28 OF 71 USPATFULL (Continued)

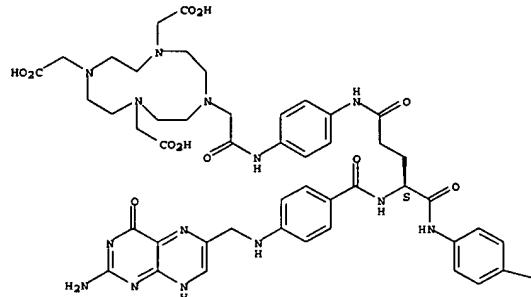


RN 251084-43-2 USPATFULL  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-{[(2S)-2-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-1,5-dioxo-1,5-pentanediyil]bis[imino-4,1-phenyleneimino(2-oxo-2,1-ethanediyl)]}bis- (9CI) (CA INDEX NAME)

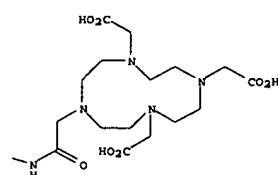
Absolute stereochemistry.

## L24 ANSWER 28 OF 71 USPATFULL (Continued)

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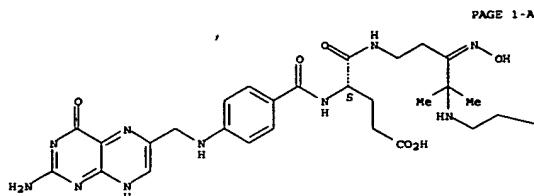


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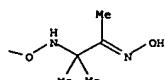


RN 251084-49-8 USPATFULL  
 CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid, 15-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-2,10-bis(hydroxyimino)-3,9,9-tetramethyl-14-oxo-, (1S)- (9CI) (CA INDEX NAME)

L24 ANSWER 28 OF 71 USPATFULL (Continued)  
Absolute stereochemistry.  
Double bond geometry unknown.



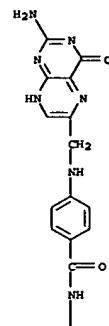
PAGE 1-B



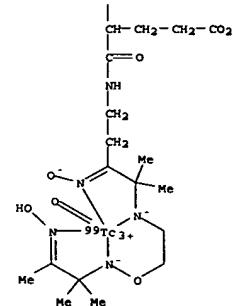
RN 251084-50-1 USPATFULL  
CN Technetate(1-)-99Tc, [(4S)-4-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-9,17-bis(hydroxyimino-.kappa.N)-10,10,16,16-tetramethyl-5-oxo-14-oxa-6,11,15-triazaoctadecanoato(4-)]-, hydrogen, (SP-5-15)- (9CI) (CA INDEX NAME)

L24 ANSWER 28 OF 71 USPATFULL (Continued)

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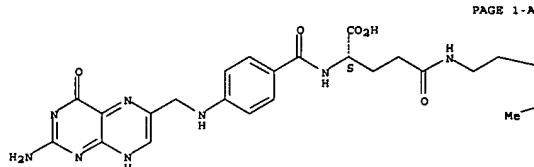


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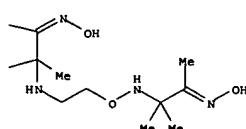


L24 ANSWER 28 OF 71 USPATFULL (Continued)  
RN 251084-51-2 USPATFULL  
CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
17-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-2,10-bis(hydroxyimino)-3,3,9,9-tetramethyl-14-oxo-, (17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



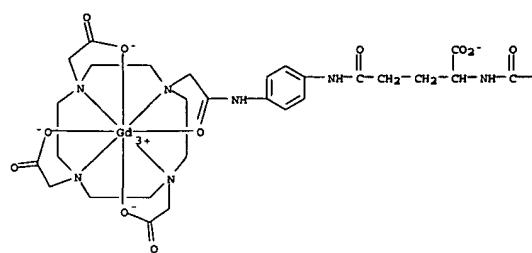
PAGE 1-B



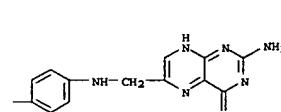
IT 251084-38-5P 251084-39-6P 251084-41-0P  
251084-42-1P 251084-44-3P 251084-45-4P  
251084-52-3P  
(prepn. for use in diagnostic and therapeutic applications)  
RN 251084-38-5 USPATFULL  
CN Gadolinate(1-), [10-[2-[(4-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino)-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-(oxo-.kappa.O)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(4-).-kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]-, sodium (9CI) (CA INDEX NAME)

L24 ANSWER 28 OF 71 USPATFULL (Continued)

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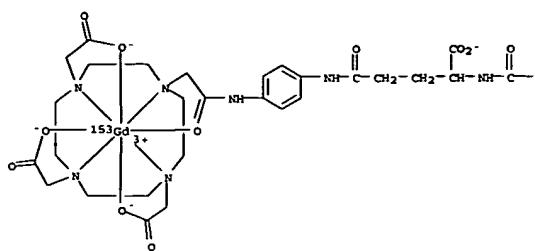
● Na+



RN 251084-39-6 USPATFULL  
CN Gadolinate(1-)-153Gd, [10-[2-[(4-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino)-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-(oxo-.kappa.O)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(4-).-kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]-, sodium (9CI) (CA INDEX NAME)

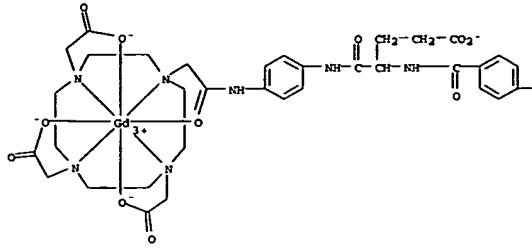
L24 ANSWER 28 OF 71 USPATFULL (Continued)

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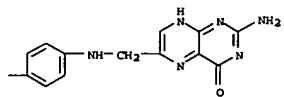
● Na<sup>+</sup>

L24 ANSWER 28 OF 71 USPATFULL (Continued)

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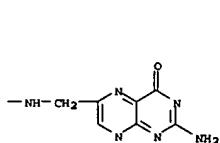
● Na<sup>+</sup>

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RN 251084-41-0 USPATFULL

CN Gadolinate(1-), [10-(2-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino)-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-(oxo-.kappa.O)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(4-).-kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]-, sodium (9CI) (CA INDEX NAME)



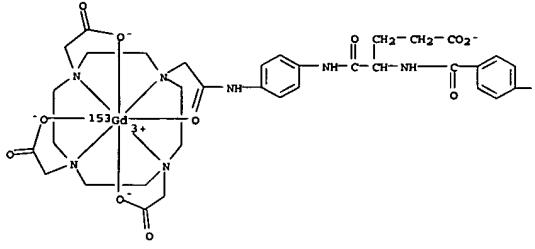
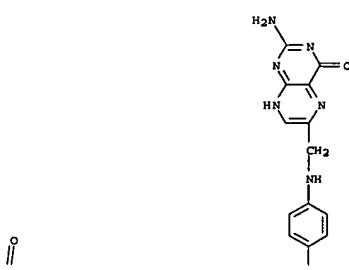
RN 251084-42-1 USPATFULL

CN Gadolinate(1-)-153Gd, [10-[2-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino)-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-(oxo-.kappa.O)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(4-).-kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]-, sodium (9CI) (CA INDEX NAME)

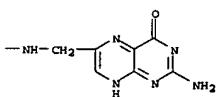
L24 ANSWER 28 OF 71 USPATFULL (Continued)

L24 ANSWER 28 OF 71 USPATFULL (Continued)

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● Na<sup>+</sup>

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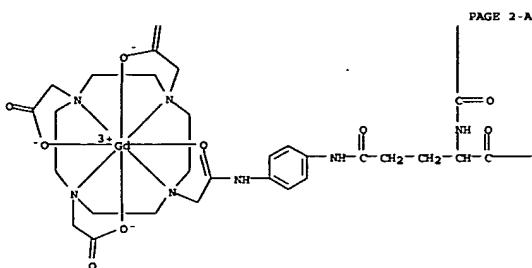
RN 251084-44-3 USPATFULL

CN Gadolinium, {[mu-((10,10'-[[2-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino)-1,5-dioxo-1,5-pentanediyil]bis(imino-4,1-phenyleneimino)2-(oxo-.kappa.O)-2,1-ethanediyl])bis[1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7)](6-)}di-, (9CI) (CA INDEX NAME)

O

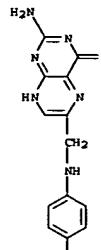
PAGE 1-B

L24 ANSWER 28 OF 71 USPATFULL (Continued)

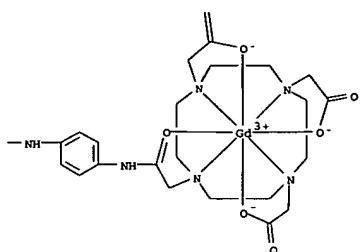


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II

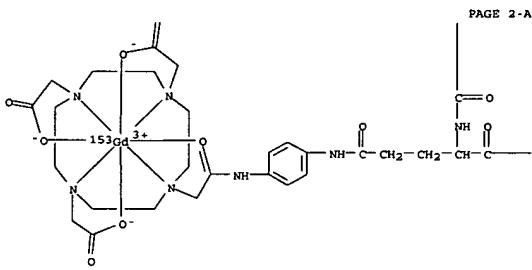
RN 251084-45-4 USPATFULL  
 CN Gadolinium-153Gd, [mu-[(10,10'-(2-[(4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl)amino)-1,5-dioxo-1,5-pentanediyil]bis(imino-4,1-phenyleneimino(2-(oxo-.kappa.O)-2,1-ethanediyil)]bis[1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7]](6-)]di- (9CI) (CA INDEX NAME)

O

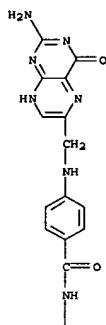
L24 ANSWER 28 OF 71 USPATFULL (Continued)

L24 ANSWER 28 OF 71 USPATFULL (Continued)

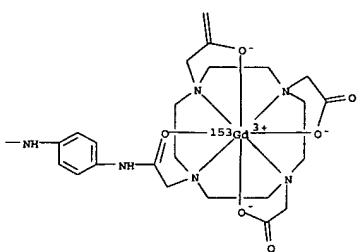
PAGE 1-A



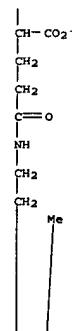
PAGE 2-A



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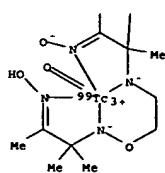


PAGE 2-B



RN 251084-52-3 USPATFULL  
 CN Technetate(1-)-99Tc, [(2S)-2-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-9,17-bis(hydroxyimino-.kappa.N)-10,10,16,16-tetramethyl-5-oxo-14-oxa-6,11,15-triazaoctadecanato(4-)]-, hydrogen, (SP-5-15)- (9CI) (CA INDEX NAME)

L24 ANSWER 28 OF 71 USPATFULL (Continued)

● H<sup>+</sup>IT 251084-56-7P 251084-60-3P 251084-64-7P  
251084-76-1P 251084-80-7P

(reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-56-7 USPATFULL

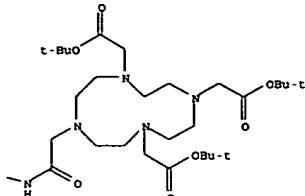
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[[4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino]benzoyl)amino]-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-, triis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 3-A

L24 ANSWER 28 OF 71 USPATFULL (Continued)

PAGE 1-B

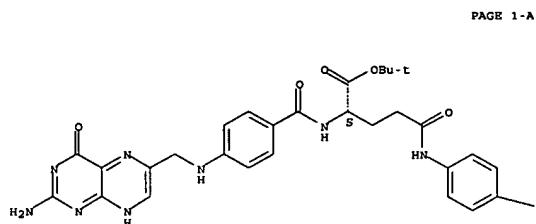


RN 251084-60-3 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4S)-2-[(4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl]amino]-5-(1,1-dimethylethoxy)-1,5-dioxopentyl]amino]phenyl]amino]-2-oxoethyl]-, triis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

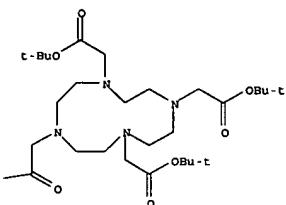
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L24 ANSWER 28 OF 71 USPATFULL (Continued)

L24 ANSWER 28 OF 71 USPATFULL (Continued)

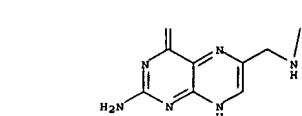
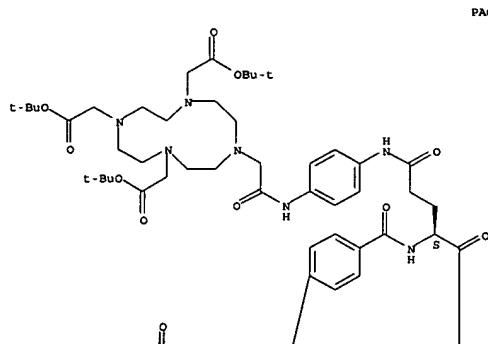
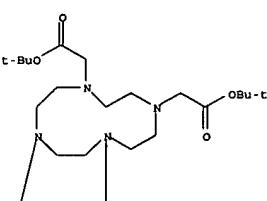
PAGE 1-B



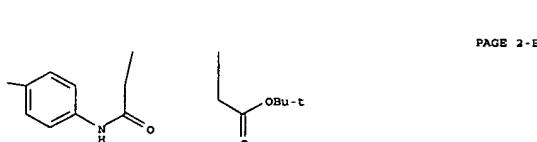
RN 251084-64-7 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-([(2S)-2-[(4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl]amino]-1,5-dioxo-1,5-pentanediyl)bis(imino-4,1-phenyleneimino)(2-oxo-2,1-ethanediyl)]bis-, hexakis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



PAGE 2-A

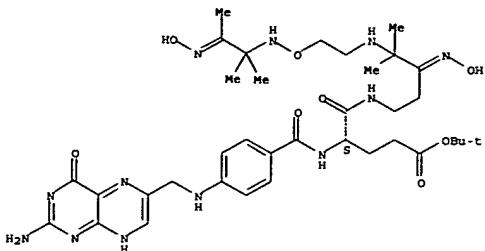


PAGE 2-B

RN 251084-76-1 USPATFULL  
CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
15-[(4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl]amino]-2,10-bis(hydroxymethyl)-, 3,3,9,9-tetramethyl-14-oxo-, 1,1-dimethylethyl ester, (15S)- (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 28 OF 71 USPATFULL (Continued)  
Double bond geometry unknown.

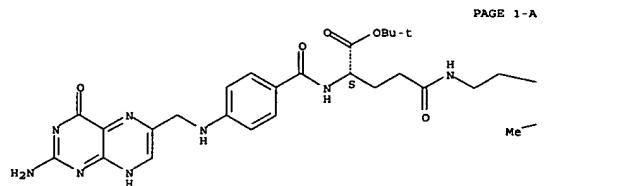
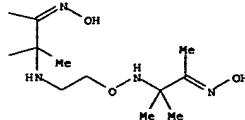


RN 251084-80-7 USPATFULL  
CN 5-Oxa-4,8,13-triezaoctadecan-18-oic acid,  
17-[14-[(2-amino-1,4-dihydro-4-  
oxo-6-pteridinyl)methyl]benzoyl]amino]-2,10-bis(hydroxymethyl)-  
3,3,9,9-tetramethyl-14-oxo-, 1,1-dimethylethyl ester, (17S)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.

L24 ANSWER 28 OF 71 USPATFULL (Continued)

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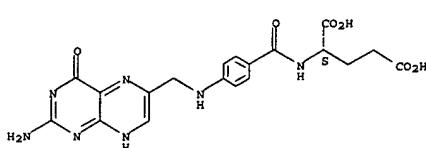
L24 ANSWER 29 OF 71 USPATFULL  
ACCESSION NUMBER: 2000-91722 USPATFULL  
TITLE: Homogeneous immunoassays using mutant glucose-6-phosphate dehydrogenases  
INVENTOR(S): Jakobovits, Edward Benjamin, Menlo Park, CA, United States  
Silen, Joy L., Belmont, CA, United States  
Levy, Mark J., San Jose, CA, United States  
Goodman, Thomas C., Mountain View, CA, United States  
Becker, Martin, Palo Alto, CA, United States  
Ullman, Edwin P., Atherton, CA, United States  
Caldwell, Robert M., San Carlos, CA, United States  
Bott, Richard R., Burlingame, CA, United States  
Barnett, Christopher Charles, South San Francisco, CA, United States  
PATENT ASSIGNEE(S): Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6090567	20000718	
APPLICATION INFO.:	US 1995-445464	19950522 (8)	
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-44857, filed on 8 Apr 1993		

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Housel, James C.  
ASSISTANT EXAMINER: Portner, Ginny Allen  
LEGAL REPRESENTATIVE: Bosse, Mark L., Peries, Rohan, Leiterer, Theodore J.  
NUMBER OF CLAIMS: 51  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 16 Drawing Page(s)  
LINE COUNT: 3696  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Methods for immunoassay of analytes employing mutant glucose-6-phosphate dehydrogenase (G6PDH) enzymes as labels. In particular, the invention relates to the use of conjugates of an analyte or analyte analog and a mutant NAD<sup>+</sup>-dependent G6PDH differing from any precursor G6PDH by the deletion, substitution, or insertion, or any combination thereof of at least one amino acid per subunit. The invention also involves the construction of several mutations in precursor glucose-6-phosphate dehydrogenase (G6PDH) enzymes. Typically, the mutations involve deletion or substitution of one or more lysine residues, or introduction of one or more cysteine residues by insertion of cysteine to precursor G6PDH or substitution of precursor G6PDH amino acids residues with cysteine. The present invention also relates to conjugates of the subject enzymes and specific binding pair members, kits useful in performing the methods of the invention, cell lines producing the subject enzymes, DNA sequences encoding the subject enzymes, and vectors containing DNA encoding the subject enzymes and designed to allow a host cell to produce the subject enzymes.

IT 59-30-3, Polic acid, analysis  
(immunoanal. detn. of; homogeneous immunoassays using conjugates of analytes and substituted analogs of glucose-6-phosphate dehydrogenases)  
RN 59-30-3 USPATFULL  
CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-

L24 ANSWER 29 OF 71 USPATFULL (Continued)  
pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
Absolute stereochemistry.



L24 ANSWER 30 OF 71 USPATFULL  
 ACCESSION NUMBER: 2000:80599 USPATFULL  
 TITLE: Nucleophilic polysubstituted aryl acridinium ester  
 conjugates and syntheses thereof  
 INVENTOR(S): Law, Say-Jong, Westwood, MA, United States  
 PATENT ASSIGNEE(S): Bayer Corporation, East Walpole, MA, United States  
 (U.S. corporation)

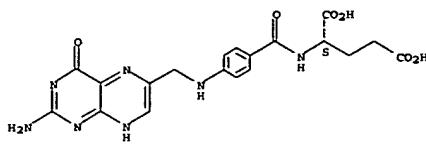
NUMBER	KIND	DATE
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PATENT INFORMATION: US 6080591	20000627	
APPLICATION INFO.: US 1997-920372	19970829 (8)	
RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-32947, filed on 17 Mar		
1993, now patented, Pat. No. US 5663074 which is a continuation of Ser. No. US 1992-871601, filed on 17 Apr 1992, now patented, Pat. No. US 5241070 which is a continuation of Ser. No. US 1988-249620, filed on 26 Sep 1988, now abandoned		

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Wortman, Donna  
 ASSISTANT EXAMINER: Brumback, Brenda G.  
 NUMBER OF CLAIMS: 15  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 18 Drawing Figure(s); 15 Drawing Page(s)  
 LINE COUNT: 1138  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB This invention is directed to novel nucleophilic polysubstituted aryl acridinium conjugates and the methods for preparation thereof. The novel nucleophilic polysubstituted aryl acridinium conjugates are useful in biological assays, including novel assays for the determination of Vitamin B<sub>sub</sub>12, folate, cortisol, estradiol, and thromboxane B<sub>sub</sub>2.

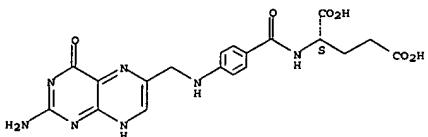
IT 59-30-3, analysis  
 (detn. of, with folate-acridinium ester deriv. conjugate)  
 RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

L24 ANSWER 30 OF 71 USPATFULL (Continued)  
 RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



Absolute stereochemistry.



IT 59-30-3DP, derivs., conjugates with acridinium ester derivs.  
 (prepn. of, for folate detn.)

L24 ANSWER 31 OF 71 USPATFULL  
 ACCESSION NUMBER: 2000:37407 USPATFULL  
 TITLE: Unit dosage forms for treatment of vasoconstriction  
 and related conditions  
 INVENTOR(S): Richardson, Kenneth T., Anchorage, AK, United States  
 Pearson, Don C., Tacoma, WA, United States  
 PATENT ASSIGNEE(S): ChronoRX, LLC, Anchorage, AK, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 6042849	20000328	
APPLICATION INFO.: US 1998-111055	19980707 (9)	
RELATED APPLN. INFO.: Continuation of Ser. No. US 849068		

NUMBER	DATE
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PRIORITY INFORMATION: US 1996-15115P	19960410 (60)
DOCUMENT TYPE: Utility	
FILE SEGMENT: Granted	
PRIMARY EXAMINER: Jordan, Kimberly	
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP	
NUMBER OF CLAIMS: 21	
EXEMPLARY CLAIM: 1	
LINE COUNT: 871	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Magnesium is formulated in combination with vitamin E, vitamin C, folate, selenium, and optionally melatonin in a unit dosage form for oral administration, for the treatment of vasoconstriction and the physiological and pathological conditions giving rise to vasoconstriction. These active agents complement each other in suppressing these conditions, using a variety of mechanisms operating

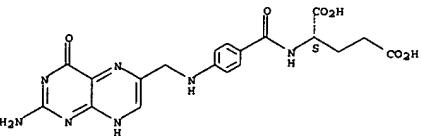
in conjunction with one another. The inclusion of magnesium in a plurality of forms provides additional advantages in terms of controlling and sustaining the release of magnesium in locations along the digestive tract where the magnesium will have its greatest effectiveness as a therapeutic agent, thus improving control over the clinical bioavailability of magnesium and in improving the selection of appropriate therapeutic ranges.

IT 59-30-3, Polyc acid, biological studies  
 (oral dosage forms contg. minerals and vitamins for treatment of vasoconstriction and related conditions)

RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

L24 ANSWER 31 OF 71 USPATFULL (Continued)

Absolute stereochemistry.



L24 ANSWER 32 OF 71 USPATFULL  
 ACCESSION NUMBER: 2000127786 USPATFULL  
 TITLE: Homogeneous immunoassays using mutant glucose-6-phosphate dehydrogenases  
 INVENTOR(S): Jakobovits, Edward Benjamin, Menlo Park, CA, United States  
 Silen, Joy L., Belmont, CA, United States  
 Levy, Mark J., San Jose, CA, United States  
 Goodman, Thomas C., Mountain View, CA, United States  
 Becker, Martin, Palo Alto, CA, United States  
 Ullman, Edwin F., Atherton, CA, United States  
 Caldwell, Robert M., San Carlos, CA, United States  
 Bott, Richard R., Burlingame, CA, United States  
 Barnett, Christopher Charles, South San Francisco, CA, United States  
 PATENT ASSIGNEE(S): Behring Diagnostics GmbH, Marburg, Germany, Federal Republic of (non-U.S. corporation)

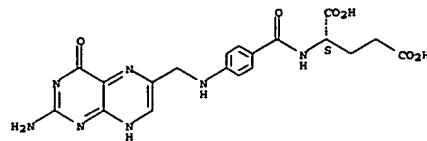
NUMBER	KIND	DATE
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PATENT INFORMATION: US 6033890 20000307  
 APPLICATION INFO.: US 1995-445463 19950522 (8)  
 RELATED APPLN. INFO.: Division of Ser. No. US 1993-44857, filed on 8 Apr 1993

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Wax, Robert A.  
 ASSISTANT EXAMINER: Longton, Enrique D.  
 LEGAL REPRESENTATIVE: Leiterer, Theodore J., Ruszala, Lois K.  
 NUMBER OF CLAIMS: 18  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 16 Drawing Figure(s); 16 Drawing Page(s)  
 LINE COUNT: 3755  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention relates to methods for immunoassay of analytes employing mutant glucose-6-phosphate dehydrogenase (G6PDH) enzymes as labels. In particular, the invention relates to the use of conjugates of an analyte or analyte analog and a mutant NAD<sup>+</sup> dependent G6PDH differing from any precursor G6PDH by the deletion, substitution, or insertion, or any combination thereof of at least one amino acid per subunit. The invention also involves the construction of several mutations in precursor glucose-6-phosphate dehydrogenase (G6PDH) enzymes. Typically, the mutations involve deletion or substitution of one or more lysine residues, or introduction of one or more cysteine residues by insertion of cysteine to precursor G6PDH or substitution of precursor G6PDH amino acid residues with cysteine. The present invention also relates to conjugates of the subject enzymes and specific binding pair members, kits useful in performing the methods of the invention, cell lines producing the subject enzymes, DNA sequences encoding the subject enzymes, and vectors containing DNA encoding the subject enzymes and designed to allow a host cell to produce the subject enzymes.  
 IT 59-30-3, Polic acid, analysis (immunoanal. detn. of; homogeneous immunoassays using conjugates of

L24 ANSWER 32 OF 71 USPATFULL (Continued)  
 analytes and substituted analogs of glucose-6-phosphate dehydrogenases)  
 RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1999:753119 CAPLUS  
 DOCUMENT NUMBER: 132:8490  
 TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications  
 INVENTOR(S): Wedekind, Paul W.; Wager, Ruth E.; Arunachalam, Thangavel; Ramalingam, Kondareddiar; Linder, Karen E.; Ranganathan, Ramachandran S.; Nunn, Adrian D.; Raju, Natarajan; Tweedie, Michael P.; Bracco International B.V., Neth.  
 PATENT ASSIGNEE(S): PCT Int. Appl., 191 pp.  
 SOURCE: CODEN: PIXKD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9959640	A2	19991125	WO 1999-IB8858	19990512
WO 9959640	A3	20000202		
W: AU, CA, JP, NO, NZ R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6093382	A	20000725	US 1998-80157	19980516
AU 9916225	A1	19991206	AU 1999-36225	19990512
EP 1077729	A2	20010228	EP 1999-918204	19990512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002515462	T2	20020528	JP 2000-549303	19990512
US 6221234	B1	20010424	US 2000-477072	20000103
US 2001004454	A1	20010621	US 2000-752867	20001230
PRIORITY APPLN. INFO.: US 1998-80157			A 19980516	
			WO 1999-IB8858	W 19990512
			US 2000-477072	A3 20000103

OTHER SOURCE(S): MARPAT 132:8490

AB Diagnostic and therapeutic compns. as complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use are claimed. The complexes contain the .alpha., .gamma., or bis isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent. Thus, I and its Gd and 153Gd complexes were prep'd.

IT 251084-37-4P 251084-40-9P 251084-43-2P  
 251084-49-8P 251084-50-1P 251084-51-2P  
 RL: RCT (Reagent); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant Or reagent); (prepn. and reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

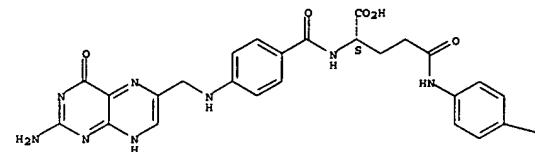
RN 251084-37-4 CAPLUS

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4S)-4-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

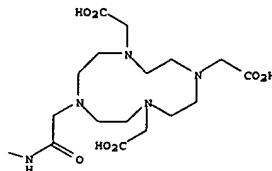
Absolute stereochemistry.

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

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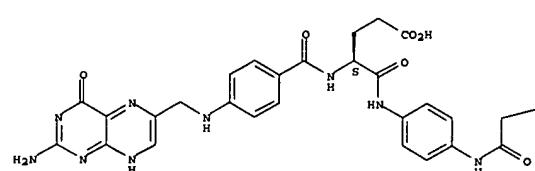


RN 251084-40-9 CAPLUS

CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4S)-4-[[2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

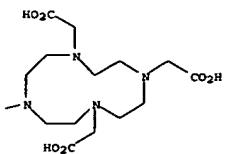


L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

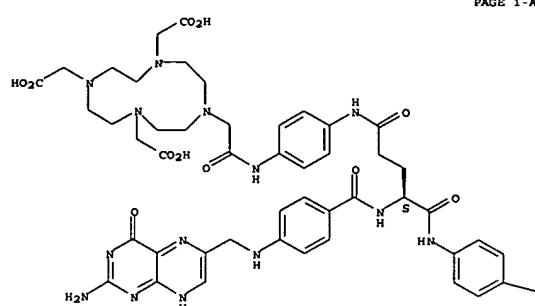
PAGE 1-B

PAGE 1-B

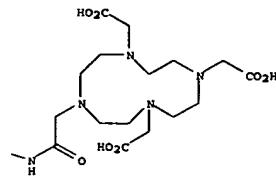


RN 251084-43-2 CAPLUS  
CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-{[(2S)-2-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-1,5-dioxo-1,5-pentanediyl]bis[imino-4,1-phenyleneimino(2-oxo-2,1-ethanediyil)]bis- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

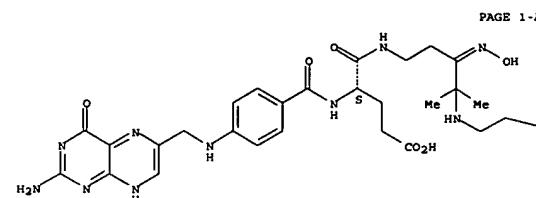


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RN 251084-49-8 CAPLUS  
CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
15-{14-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino}benzoyl]amino)-2,10-bis(hydroxyimino)-3,3,9,9-tetramethyl-14-oxo-, (15S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



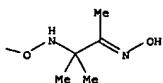
PAGE 1-A

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

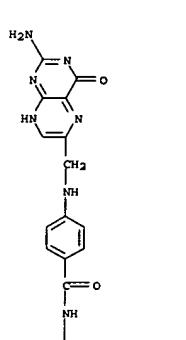
L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

PAGE 1-B

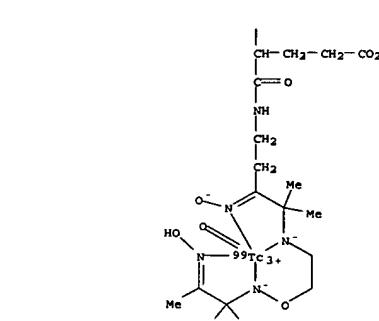
PAGE 2-A



RN 251084-50-1 CAPLUS  
CN Technetate(1-)-99Tc, [(4S)-4-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino)-9,17-bis(hydroxyimino-.kappa.N)-10,10,16,16-tetramethyl-5-oxo-14-oxa-6,11,15-triazaoctadecanoato(4-)]-, hydrogen, (SP-5-15)- (9CI) (CA INDEX NAME)

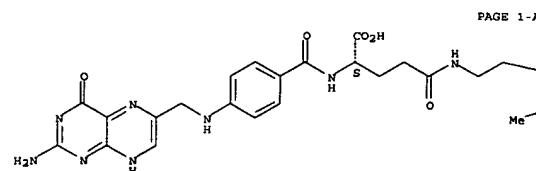


PAGE 1-A

● H<sup>+</sup>

RN 251084-51-2 CAPLUS  
CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
17-{14-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino}benzoyl]amino)-2,10-bis(hydroxyimino)-3,3,9,9-tetramethyl-14-oxo-, (17S)- (9CI) (CA INDEX NAME)

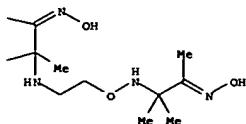
Absolute stereochemistry.  
Double bond geometry unknown.



PAGE 1-A

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

PAGE 1-B



IT 251084-38-5P 251084-39-6P 251084-41-0P  
251084-42-1P 251084-44-3P 251084-45-4P  
251084-52-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. for use in diagnostic and therapeutic applications)

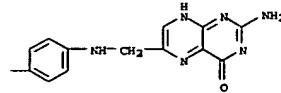
RN 251084-38-5 CAPLUS

CN Gadolinate(1-), [10-[2-[[4-[(4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-(oxo-.kappa.O)ethyl]-1,4,7,10-

tetraazacyclododecane-1,4,7-triacetato(4-).kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7-, sodium (9CI) (CA INDEX NAME)

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

PAGE 1-B

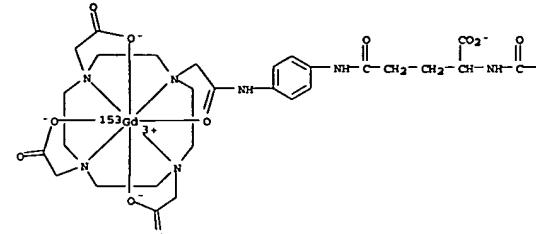


RN 251084-39-6 CAPLUS

CN Gadolinate(1-)-153Gd, [10-[2-[[4-[[4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-(oxo-.kappa.O)ethyl]-1,4,7,10-

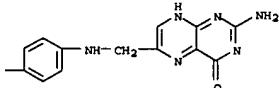
tetraazacyclododecane-1,4,7-triacetato(4-).kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7-, sodium (9CI) (CA INDEX NAME)

PAGE 1-A

● Na<sup>+</sup>● Na<sup>+</sup>

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

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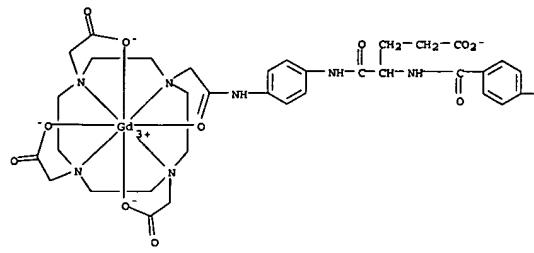


RN 251084-41-0 CAPLUS

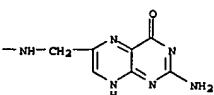
CN Gadolinate(1-), [10-[2-[[4-[[4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-(oxo-.kappa.O)ethyl]-1,4,7,10-

tetraazacyclododecane-1,4,7-triacetato(4-).kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7-, sodium (9CI) (CA INDEX NAME)

PAGE 1-A

● Na<sup>+</sup>

PAGE 1-B



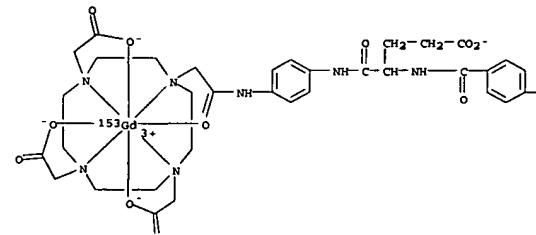
L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 251084-42-1 CAPLUS

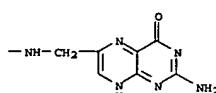
CN Gadolinate(1-)-153Gd, [10-[2-[[2-[[4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]phenyl]amino]-2-(oxo-.kappa.O)ethyl]-1,4,7,10-

tetraazacyclododecane-1,4,7-triacetato(4-).kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7-, sodium (9CI) (CA INDEX NAME)

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● Na<sup>+</sup>

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RN 251084-44-3 CAPLUS

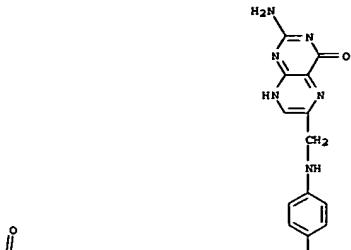
CN Gadolinium, (.mu.-[10,10'-{[2-[[4-((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino]benzoyl]amino]-1,5-dioxo-1,5-pentanediyil]bis(imino-4,1-phenyleneimino[2-(oxo-.kappa.O)-2,1-ethanediyl]])bis[1,4,7,10-

tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10,.kappa.O1,.kappa.O4,.kappa.O7-]di- (9CI) (CA INDEX NAME)

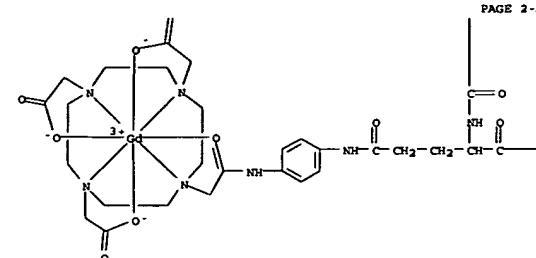
L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

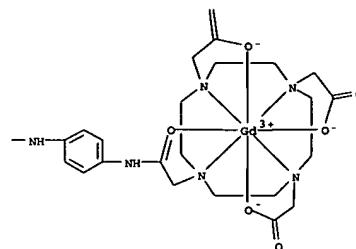
PAGE 1-A



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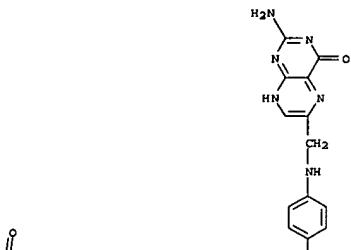
PAGE 2-B



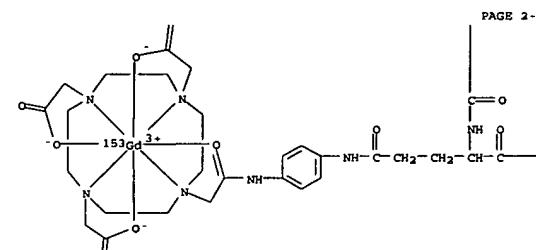
L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

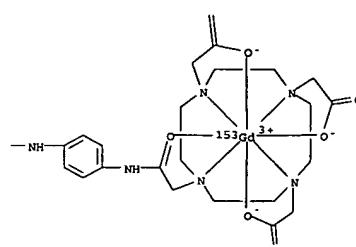
PAGE 1-A



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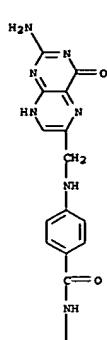
PAGE 2-B



RN 251084-45-4 CAPLUS  
CN Gadolinium-153Gd, [(mu-[(10,10'-[12-[[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-1,5-dioxo-1,5-pentanediyil)bis(imino-4,1-phenyleneimino[2-(oxo-kappa.O)-2,1-ethanediyl])bis[1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.a.N10,.kappa.O1,.kappa.O4,.kappa.O7](6-)])di-(9CI) (CA INDEX NAME)

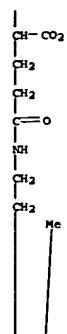
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L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

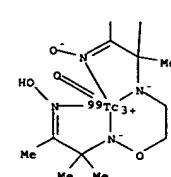


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L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)



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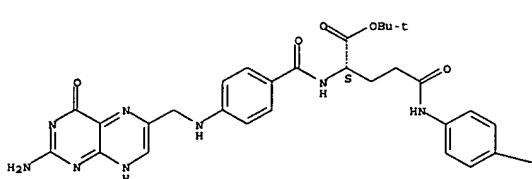
 $\bullet \text{H}^+$ 

IT 251084-56-7P 251084-60-3P 251084-64-7P  
 251084-76-1P 251084-80-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 RN 251084-56-7 CAPLUS  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[(4S)-4-

[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-5-(1,1-dimethylethoxy)-1,5-dioxopentylaminophenylamino]-2-oxoethyl]-, triis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

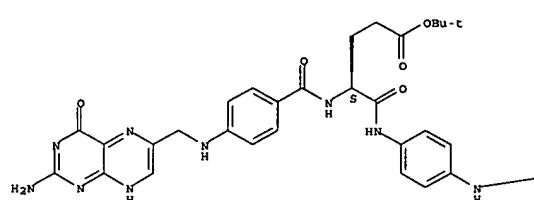
Absolute stereochemistry.



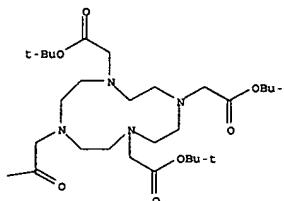
PAGE 1-A

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

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RN 251084-64-7 CAPLUS  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10,10'-{[(2S)-2-[(4-

[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-1,5-dioxa-1,5-pentanediylibis[amino-4,1-phenyleneimino(2-oxo-2,1-ethanediyil)]bis-, hexakis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

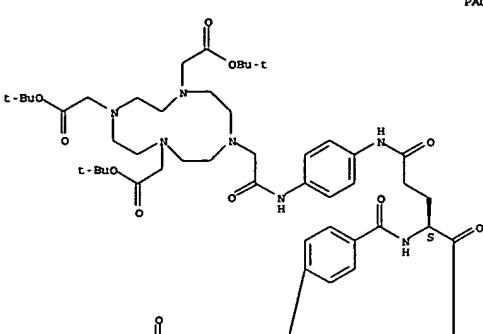
Absolute stereochemistry.

RN 251084-60-3 CAPLUS  
 CN 1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic acid, 10-[2-[(4-[(2S)-2-

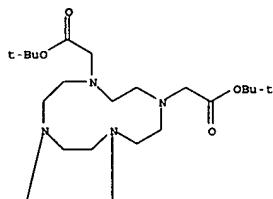
[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-5-(1,1-dimethylethoxy)-1,5-dioxopentylaminophenylamino]-2-oxoethyl]-, triis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)

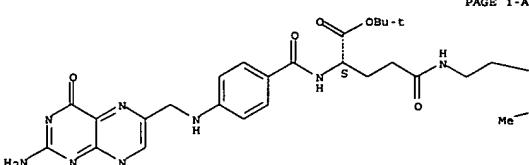


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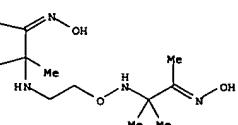


L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
 17-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-2,10-bis(hydroxymino)-3,3,9,9-tetramethyl-14-oxo-, 1,1-dimethylethyl ester, (17S)- (9CI) (CA INDEX NAME)

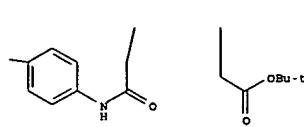
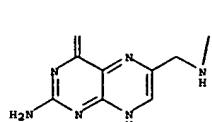
Absolute stereochemistry.  
 Double bond geometry unknown.



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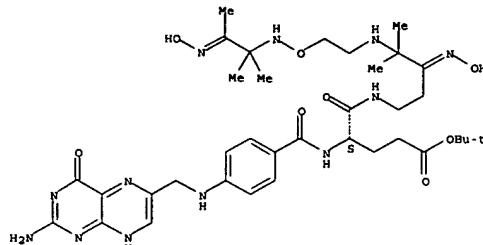


L24 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 251084-76-1 CAPLUS  
 CN 5-Oxa-4,8,13-triazaoctadecan-18-oic acid,  
 17-[(4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino)benzoyl]amino]-2,10-bis(hydroxymino)-3,3,9,9-tetramethyl-14-oxo-, 1,1-dimethylethyl ester, (17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry unknown.



RN 251084-80-7 CAPLUS

L24 ANSWER 34 OF 71 USPATFULL  
 ACCESSION NUMBER: 1999124443 USPATFULL  
 TITLE: In vivo binding pair pretargeting  
 INVENTOR(S): Pomato, Nicholas, Frederick, MD, United States  
 McCabe, Richard P., West Chester, PA, United States  
 Hawkins, Gregory A., Madison, WI, United States  
 Bredehorst, Reinhard, Hamburg, Germany, Federal Republic of  
 Kim, Chong-Ho, Rockville, MD, United States  
 Vogel, Carl-Wilhelm, Hamburg, Germany, Federal Republic

of Perimmune Holdings, Inc., Rockville, MD, United States  
 (U.S. corporation)

NUMBER	KIND	DATE
US 5965106		19991012
US 1995-461267		19950605 (8)

PATENT INFORMATION:  
 APPLICATION INFO.: Continuation-in-part of Ser. No. US 1993-140186, filed on 4 Nov 1993, now patented. Pat. No. US 5578289 which is a continuation-in-part of Ser. No. US 1992-846453, filed on 4 Mar 1992, now abandoned

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Green, Lora M.  
 LEGAL REPRESENTATIVE: Gormley, Mary E.  
 NUMBER OF CLAIMS: 2  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 59 Drawing Figure(s); 42 Drawing Page(s)

LINE COUNT: 3962  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

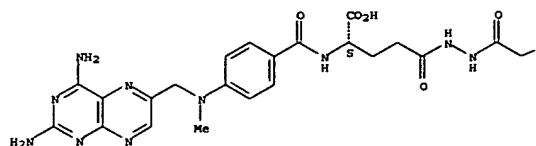
AB A method for in-vivo targeting a functional moiety in a patient by administering a targeting moiety coupled to an affinity component, wherein the targeting moiety has affinity for binding sites in the target area, and administering a binding partner to the affinity component coupled to a functional moiety to localize the functional moiety in the target area. Preferably the targeting moiety is an antibody and the functional moiety is a radionuclide when performing in vivo imaging or therapy. The affinity component may be a novel methotrexate analog. Preferably, the affinity component is thermo-stabilized.  
 IT 151395-94-7P 246154-65-4P 246154-67-6P  
 (In vivo binding pair pretargeting with antibodies and methotrexate analogs)

RN 151395-94-7 USPATFULL  
 CN 3,6,9,12,13-Pentaazaoctadecanedioic acid,  
 3,6,9-tetra-carboxymethyl)-17-[(4-[(2,4-diamino-6-pteridinyl)methyl]methylamino)benzoyl]amino]-11,14-dioxo-, (17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

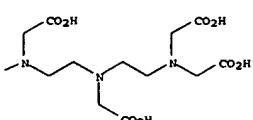
L24 ANSWER 34 OF 71 USPATFULL (Continued)

PAGE 1-A

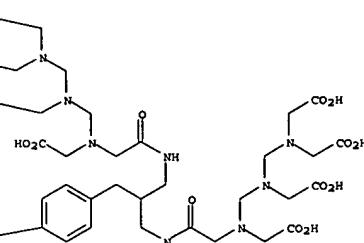


PAGE 1-A  
HO<sub>2</sub>C—  
HO<sub>2</sub>C—  
HO<sub>2</sub>C—

PAGE 1-B

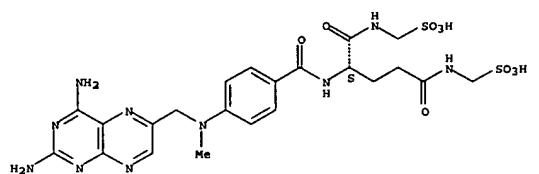


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RN 246154-65-4 USPATFULL  
CN 2-[[(2S)-2-[[4-[[[2,4-diamino-6-pteridinyl]methylamino]benzoyl]amino]-1,5-dioxo-1,5-pentanediyil]diiminobis-(9CI) (CA INDEX NAME)

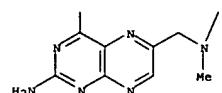
Absolute stereochemistry.



RN 246154-67-6 USPATFULL  
CN 3,5,7,10,14,17,19,21-Octaazatricosanedioc acid, 12-[[4-[[2-[(4S)-4-carboxy-4-[[2,4-diamino-6-pteridinyl]methyl]methylamino]benzoyl]amino]-1-oxobutyl]hydrazinol[thioxomethyl]amino]phenyl]methyl]-3,5,7,17,19,21-hexakis(carboxymethyl)-9,15-dioxo- (9CI) (CA INDEX NAME)

L24 ANSWER 34 OF 71 USPATFULL (Continued)

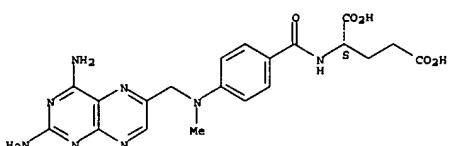
PAGE 2-A



IT 59-05-2DP, Methotrexate, conjugates 43170-88-3P  
77410-28-7P  
(in vivo binding pair pretargeting with antibodies and methotrexate analogs)

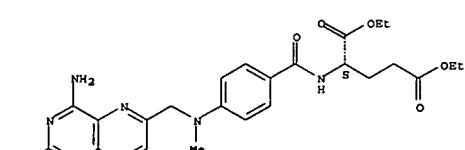
RN 59-05-2 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 43170-88-3 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]- diethyl ester (9CI) (CA INDEX NAME)

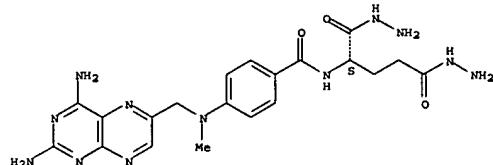
Absolute stereochemistry.



RN 77410-28-7 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]- dihydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

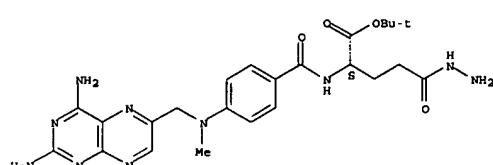
L24 ANSWER 34 OF 71 USPATFULL (Continued)



IT 79640-69-0  
(in vivo binding pair pretargeting with antibodies and methotrexate analogs)

RN 79640-69-0 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]- 1-(1,1-dimethylethyl) ester, 5-hydrazide (9CI) (CA INDEX NAME)

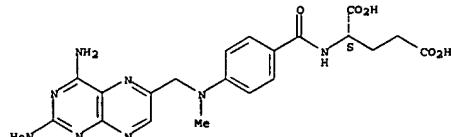
Absolute stereochemistry.



IT 59-05-2, Methotrexate  
(in vivo binding pair pretargeting with antibodies and methotrexate analogs)

RN 59-05-2 USPATFULL  
CN L-Glutamic acid,  
N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 34 OF 71 USPATFULL (Continued)

L24 ANSWER 35 OF 71 USPATFULL  
 ACCESSION NUMBER: 1999:92583 USPATFULL  
 TITLE: Preparation of sub 100 Å magnetic particles and  
 magnetic molecular switches  
 INVENTOR(S): Chagnon, Mark S., Pelham, NH, United States  
 Ferris, John R., Newburyport, MA, United States  
 Carter, Michelle J., Derry, NH, United States  
 Hamilton, Tracy J., Hudson, NH, United States  
 Gray, Maria A., Derry, NH, United States  
 PATENT ASSIGNEE(S): Binet, NH, Inc., Atkinson, NH, United States (U.S.  
 corporation)

NUMBER	KIND	DATE
US 5935866		19990810
US 1992-894260		19920608 (7)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1990-556169, filed on 10 Aug 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-455071, filed on 22 Dec 1989, now abandoned		

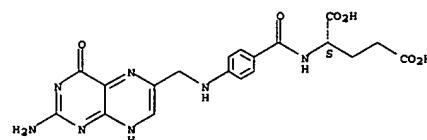
DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Woodward, Michael P.  
 LEGAL REPRESENTATIVE: Hayes, Soloway, Hennessy, Grossman & Hage, P.C.  
 NUMBER OF CLAIMS: 69  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)  
 LINE COUNT: 1043  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Inorganic oxides of substantially uniform particle size distribution  
 are prepared by contacting aqueous solutions of an inorganic salt and an  
 inorganic base across a porous membrane wherein the membrane contains a  
 plurality of pores which allows for precipitation of a substantially  
 mono-dispersed size inorganic oxide particles on one side of the  
 membrane and precipitation of a salt of the corresponding base on a  
 second side of the membrane.

IT 59-30-3, biological studies  
 (antibodies to: prepn. of sub 100 Å magnetic particles and magnetic  
 mol. switches)

RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[[{(2-amino-1,4-dihydro-4-oxo-6-  
 pteridinyl)methyl]amino}benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 35 OF 71 USPATFULL (Continued)

L24 ANSWER 36 OF 71 USPATFULL  
 ACCESSION NUMBER: 1999:65058 USPATFULL  
 TITLE: Amphiphilic linker for coupling administrable  
 diagnostically or physiologically active agents and  
 bioselective targeting compounds  
 INVENTOR(S): Tournier, Herve, Valençay, France  
 Pochon, Sibylle, Geneva, Switzerland  
 Lamy, Bernard, Geneva, Switzerland  
 PATENT ASSIGNEE(S): Bracco Research S.A., Switzerland (non-U.S.  
 corporation)

NUMBER	KIND	DATE
US 5910300		19990608
US 1996-740620		19961031 (8)

PRIORITY INFORMATION: EP 1995-810689 19951101  
 DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Dees, Jose' G.  
 ASSISTANT EXAMINER: Jones, Dameron  
 LEGAL REPRESENTATIVE: Nixon & Vanderhye  
 NUMBER OF CLAIMS: 23  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 6 Drawing Figure(s); 3 Drawing Page(s)  
 LINE COUNT: 1328  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Administrable factors or compositions to be directed to specific sites  
 in the body of human and animal patients which comprise a medically  
 and/or diagnostically effective moiety (I) and, coupled thereto by  
 means

of a linker (L), a substance (II) having specific affinity for specific  
 sites in the organism.

Linker "L" has a structure schematized by the formula:

$Y(W-Z-R)$ .sub.m, m being 1, 2, or 4

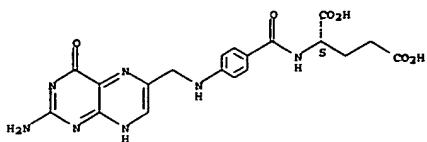
Wherein the portion YW is an amphiphile, i.e. a segment comprised of a  
 hydrophobic-lipophilic sequence "Y" and a hydrophilic-lipophobic  
 sequence "W" connected covalently together, Z is a chemical bond or an  
 intermediate connector sequence and R is a reactive function for  
 effecting coupling with selected substances (II).

IT 59-30-3 particle-linker conjugates  
 (targeted magnetically labeled mol. marker systems for MRI, and prepn.  
 thereof)

RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[[{(2-amino-1,4-dihydro-4-oxo-6-  
 pteridinyl)methyl]amino}benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 36 OF 71 USPATFULL (Continued)

L24 ANSWER 37 OF 71 USPATFULL  
ACCESSION NUMBER: 1998:156957 USPATFULL

TITLE: Unit dosage forms for treatment of vasoconstriction

and

INVENTOR(S): Richardson, Kenneth T., Anchorage, AK, United States  
Pearson, Don C., Tacoma, WA, United States  
PATENT ASSIGNEE(S): ChronoRx LLC, Anchorage, AK, United States (U.S. corporation)

related conditions

Richardson, Kenneth T., Anchorage, AK, United States  
Pearson, Don C., Tacoma, WA, United States  
ChronoRx LLC, Anchorage, AK, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5849338 19981215  
WO 9737670 19971016APPLICATION INFO.: US 1997-849068 19970826 (8)  
WO 1997-US4286 19970318

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-753967, filed on 4 Dec 1996, now abandoned

NUMBER KIND DATE

PRIORITY INFORMATION: US 1996-15115P 19960410 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Jordan, Kimberly

LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP

NUMBER OF CLAIMS: 22

EXEMPLARY CLAIM: 1

LINE COUNT: 681

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Magnesium is formulated in combination with vitamin E, vitamin C, folate, selenium, and optionally melatonin in a unit dosage form for oral administration, for the treatment of vasoconstriction and the physiological and pathological conditions giving rise to vasoconstriction. These active agents complement each other in suppressing these conditions, using a variety of mechanisms operating

in conjunction with one another. The inclusion of magnesium in a plurality of forms provides additional advantages in terms of controlling and sustaining the release of magnesium in locations along the digestive tract where the magnesium will have its greatest effectiveness as a therapeutic agent, thus improving control over the clinical bioavailability of magnesium and in improving the selection of appropriate therapeutic ranges.

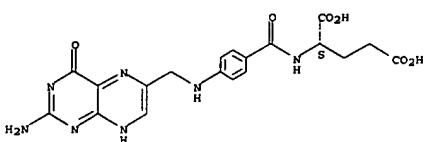
IT 59-30-3, Folic acid, biological studies  
(vitamin E and magnesium in unit dosage forms for treatment of vasoconstriction)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 37 OF 71 USPATFULL (Continued)

L24 ANSWER 38 OF 71 USPATFULL  
ACCESSION NUMBER: 1998:111628 USPATFULLTITLE: In vivo binding pair pretargeting  
INVENTOR(S): Pomato, Nicholas, Frederick, MD, United States  
McCabe, Richard P., West Chester, PA, United States  
Hawkins, Gregory Alan, Hastings, NE, United States  
Bredenhorst, Reinhard, Hamburg, Germany, Federal Republic of  
Kim, Chang-Ho, Rockville, MA, United States  
Vogel, Carl-Wilhelm Ernst, Hamburg, Germany, Federal Republic of  
PATENT ASSIGNEE(S): Akzo Nobel N.V., Arnhem, Netherlands (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5807534 19980815

APPLICATION INFO.: US 1995-452938 19950530 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-140186, filed on 4 Nov

1993, now patented, Pat. No. US 5578289 which is a continuation-in-part of Ser. No. US 1992-846453, filed on 4 Mar 1992, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Green, Lora M.

ASSISTANT EXAMINER: Musto, Neal A.

LEGAL REPRESENTATIVE: Gormley, Mary E.

NUMBER OF CLAIMS: 11

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 14 Drawing Figure(s); 13 Drawing Page(s)

LINE COUNT: 1022

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for in-vivo targeting a functional moiety in a patient by administering a targeting moiety coupled to an affinity component, wherein the targeting moiety has affinity for binding sites in a target area, and administering a binding partner to the affinity component coupled to a functional moiety to localize the functional moiety in the target area. Preferably the targeting moiety is an antibody and the functional moiety is a radiometal when performing in vivo imaging or therapy. The affinity component may be a novel methotrexate analog.

IT 151395-94-7DP, complexed with indium-111 151395-94-7D (prep., and site-specific delivery of, with dihydrofolate reductase-monoclonal antibody conjugate)

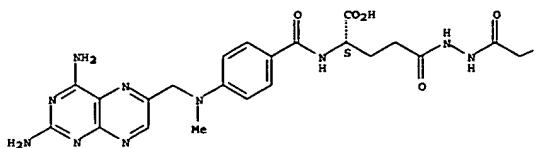
RN 151395-94-7 USPATFULL

CN 3,6,9,12,13-Pentaazaoctadecanedioic acid,  
3,6,9-tris(carboxymethyl)-17-[4-  
[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]amino]-11,14-  
dioxo-, (17S)- (9CI) (CA INDEX NAME)

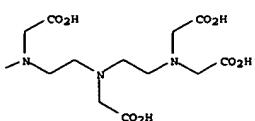
Absolute stereochemistry.

L24 ANSWER 38 OF 71 USPATFULL (Continued)

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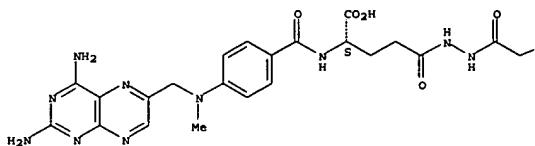
PAGE 1-B



RN 151395-94-7 USPATFULL  
 CN 3,6,9,12,13-Pentaazaoctadecanedioic acid,  
 3,6,9-tris(carboxymethyl)-17-[(4-  
 [(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]amino]-11,14-  
 dioxo-, (17S)- (9CI) (CA INDEX NAME)

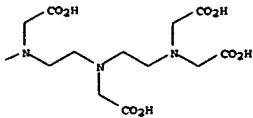
Absolute stereochemistry.

PAGE 1-A

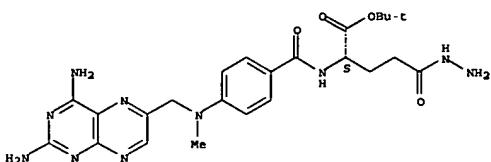


L24 ANSWER 38 OF 71 USPATFULL (Continued)

PAGE 1-B

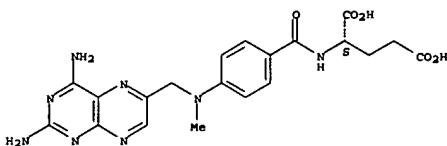


IT 79640-69-0  
 (reaction of, with DTPA dianhydride)  
 RN 79640-69-0 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo-  
 yl-, 1-(1,1-dimethylethyl) ester, 5-hydrazide (9CI) (CA INDEX NAME)  
 Absolute stereochemistry.



IT 59-05-2D, Methotrexate, conjugates with radiometal  
 (site-specific delivery of, for imaging or therapy)  
 RN 59-05-2 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo-  
 yl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 38 OF 71 USPATFULL (Continued)

L24 ANSWER 39 OF 71 USPATFULL  
 ACCESSION NUMBER: 1998108278 USPATFULL  
 TITLE: High affinity mutants of nuclear factor-interleukin 6  
 and methods of use therefor  
 INVENTOR(S): Brasier, Allan R., Galveston, TX, United States  
 PATENT ASSIGNEE(S): Board of Regents, The University of Texas System,  
 Austin, TX, United States (U.S. corporation)

NUMBER	KIND	DATE
US 5804445		19980908
APPLICATION INFO.: US 1996-585197		19960111 (8)
DOCUMENT TYPE: Utility		
FILE SEGMENT: Granted		
PRIMARY EXAMINER: Robinson, Douglas W.		
ASSISTANT EXAMINER: Nelson, Amy J.		
LEGAL REPRESENTATIVE: Arnold, White & Durkee		
NUMBER OF CLAIMS: 21		
EXEMPLARY CLAIM: 19		
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 13 Drawing Page(s)		
LINE COUNT: 2246		

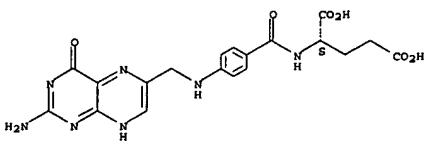
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to inhibitors of the sequence specific transcription factor nuclear factor-IL-6 (NF-IL6) and methods of use thereof. In particular, substitution mutants in the N-terminus of the NF-IL6 tryptic core domain are disclosed that have a higher binding affinity for the DNA binding site than does the wild-type sequence.

IT 59-30-3D, Polyc acid, conjugates  
 (high affinity mutants of nuclear factor-interleukin 6 core domain for  
 treating cytokine-related pro-inflammatory reaction)

RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-  
 pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 40 OF 71 USPATFULL  
 ACCESSION NUMBER: 1998:75570 USPATFULL  
 TITLE: Treatment of toxoplasmosis  
 INVENTOR(S): el Kouni, Mahmoud H., Birmingham, AL, United States  
 Guarcello, Vincent, Birmingham, AL, United States  
 Naguib, Fardon N. M., Birmingham, AL, United States  
 PATENT ASSIGNEE(S): Research Corporation Technologies, Inc., Tucson, AZ, United States (U.S. corporation)

NUMBER KIND DATE  
 -----  
 PATENT INFORMATION: US 5773424 19980630  
 APPLICATION INFO.: US 1994-358195 19941216 (8)  
 DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Wilson, James O.

LEGAL REPRESENTATIVE: Scully, Scott, Murphy & Presser  
 NUMBER OF CLAIMS: 7  
 EXEMPLARY CLAIM: 1  
 LINE COUNT: 1609

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Pharmaceutical compositions comprising a pharmaceutical composition comprising a compound which is an .alpha. or .beta. isomer, a D(+) or L(-) enantiomer of the following structural formula: ##STR1## wherein, R.sub.1 is a halogen, OR.sub.6, SR.sub.6, Ser.sub.6 or CH.sub.2 R.sub.6 and R.sub.6 is alkyl, alkenyl, arylalkyl, or aryl; ##STR2## X is CH.sub.2, O or S; R.sub.3 is H, OH, or a halogen;

R.sub.4 is H, OH, or a halogen; and

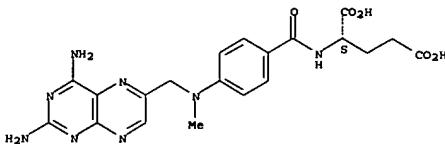
R.sub.5 is CH.sub.2, CF.sub.2, CH.sub.2 OH, or CH.sub.2 OY and Y is a carbon ester or phosphorus; and

a pharmaceutically acceptable carrier.

IT 59-05-2, Methotrexate  
 (purine nucleoside analogs for treatment of toxoplasmosis)

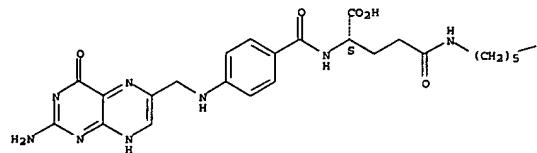
RN 59-05-2 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[[[2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyle]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

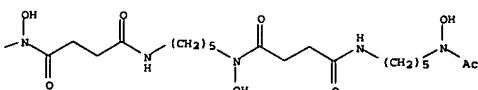


L24 ANSWER 41 OF 71 USPATFULL (Continued)

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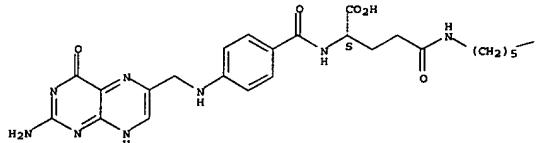


IT 170170-72-6DP, gallium-67 complexes  
 (diagnostic agent-ligand complex in compn. and method for tumor imaging, and prepn. thereof)

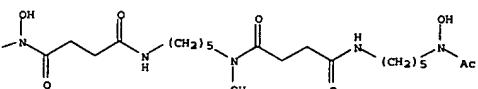
RN 170170-72-6 USPATFULL  
 CN L-Glutamine, N2-[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-N-(6,17,28-trihydroxy-7,10,18,21,29-pentaexo-6,11,17,22,28-pentaaazatriacont-1-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L24 ANSWER 41 OF 71 USPATFULL  
 ACCESSION NUMBER: 97:106781 USPATFULL  
 TITLE: Composition and method for tumor imaging  
 INVENTOR(S): Low, Philip Stewart, West Lafayette, IN, United States  
 Horn, Mark Alan, Piscataway, NJ, United States  
 Heinstein, Peter Frederick, West Lafayette, IN, United States  
 PATENT ASSIGNEE(S): Purdue Research Foundation, West Lafayette, IN, United States (U.S. corporation)

NUMBER KIND DATE  
 -----  
 PATENT INFORMATION: US 5688488 19971118  
 APPLICATION INFO.: US 1995-442174 19950516 (B)  
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-349407, filed on 5 Dec 1994 which is a continuation of Ser. No. US 1992-851544, filed on 13 Mar 1992, now patented, Pat. No. US 5416016 which is a continuation of Ser. No. US 1990-498762, filed on 28 Mar 1990, now patented, Pat. No. US 5108921 which is a continuation-in-part of Ser. No. US 1989-331816, filed on 3 Apr 1989, now abandoned

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Hollinden, Gary E.  
 ASSISTANT EXAMINER: Hartlinden, Michael G.  
 LEGAL REPRESENTATIVE: Barnes & Thornburg  
 NUMBER OF CLAIMS: 12  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 9 Drawing Figure(s); 9 Drawing Page(s)  
 LINE COUNT: 1891

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is provided for enhancing transmembrane transport of a diagnostic agent across a membrane of a living cell. The method comprises contacting a membrane of a living cell with a complex formed between said diagnostic agent and ligands selected from biotin or biotin receptor-binding analogs of biotin, folate or folate receptor-binding analogs of folate, riboflavin or riboflavin receptor-binding analogs of riboflavin to initiate receptor mediated transmembrane transport of the ligand complex. The method is used for imaging tissues in vivo.

IT 170170-72-6P  
 (diagnostic agent-ligand complex in compn. and method for tumor imaging, and prepn. thereof)

RN 170170-72-6 USPATFULL

CN L-Glutamine, N2-[[[(2-amino-1,4-dihydro-4-oxo-6-

pteridinyl)methyl]amino]benzoyl]-N-(6,17,28-trihydroxy-7,10,18,21,29-

pentaexo-6,11,17,22,28-pentaaazatriacont-1-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 41 OF 71 USPATFULL (Continued)

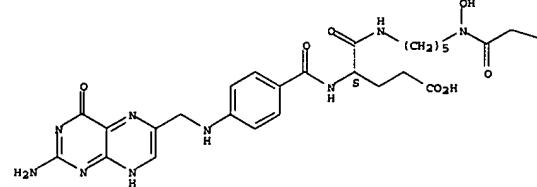
IT 170170-73-7P  
 (diagnostic agent-ligand complex in compn. and method for tumor imaging, and prepn. thereof)

RN 170170-73-7 USPATFULL

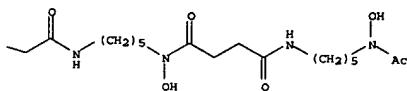
CN 3,9,14,20,25,31-Hexazahexatriacont-36-oic acid, 33-[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-3,14,25-trihydroxy-2,10,13,21,24,32-hexaoxo-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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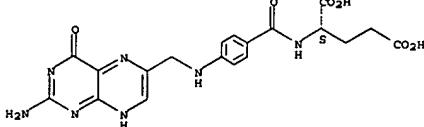


IT 59-30-3D, diagnostic agent complexes  
 (diagnostic agent-ligand complex in compn. and method for tumor imaging, and prepn. thereof)

RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[[[(2-amino-1,4-dihydro-4-oxo-6-

pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

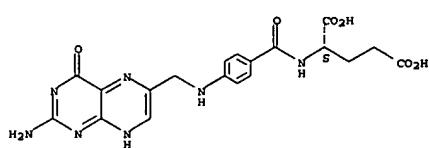


L24 ANSWER 41 OF 71 USPATFULL (Continued)

L24 ANSWER 42 OF 71 USPATFULL  
 ACCESSION NUMBER: 97:78345 USPATFULL  
 TITLE: Nucleophilic polysubstituted aryl acridinium ester conjugates and syntheses thereof  
 INVENTOR(S): Law, Say-Jong, Westwood, MA, United States  
 PATENT ASSIGNEE(S): Chiron Diagnostics Corporation, Walpole, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5663074	19970902	
APPLICATION INFO.:	US 1993-32947	19930317 (B)	
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-871601, filed on 17 Apr 1992 which is a continuation of Ser. No. US 1988-249620, filed on 26 Sep 1988, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Woodward, Michael P.		
LEGAL REPRESENTATIVE:	Morgenstern, Arthur S., Blackburn, Robert P., Klee, Maurice M.		
NUMBER OF CLAIMS:	53		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	18 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	1554		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			
AB	This invention is directed to novel nucleophilic polysubstituted aryl acridinium conjugates and the methods for preparation thereof. The novel nucleophilic polysubstituted aryl acridinium conjugates are useful in biological assays, including novel assays for the determination of Vitamin B <sub>12</sub> , folate, cortisol, estradiol, and thromboxane B <sub>2</sub> .		
IT	59-30-3, Folic acid, analysis (nucleophilic polysubstituted aryl acridinium ester conjugates prepn. as labels for binding assays)		
RN	59-30-3 USPATFULL		
CN	L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)		

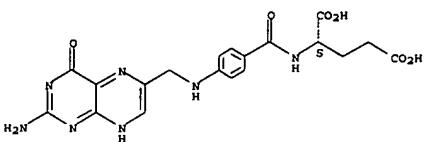
Absolute stereochemistry.



IT 59-30-3DP, Folic acid, acridinium ester conjugates  
 196080-96-3P  
 (nucleophilic polysubstituted aryl acridinium ester conjugates prepn. as labels for binding assays)

L24 ANSWER 42 OF 71 USPATFULL (Continued)  
 RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

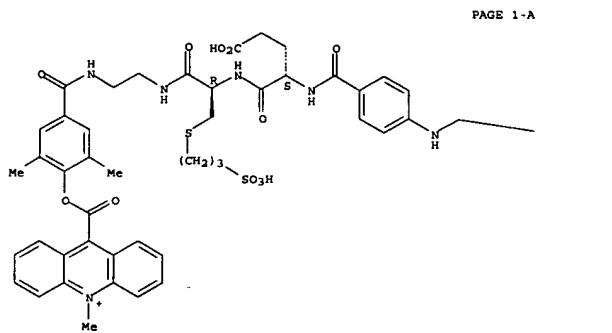
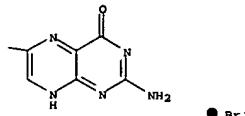


RN 196080-96-3 USPATFULL  
 CN L-Cysteinamide, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-L-alpha-glutamyl-N-[2-((3,5-dimethyl-4-((10-methylacridinium-9-yl)carbonyloxy)benzoyl)amino)ethyl]-S-(3-sulfopropyl)-, bromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 42 OF 71 USPATFULL (Continued)

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L24 ANSWER 43 OF 71 USPATFULL  
 ACCESSION NUMBER: 97:36172 USPATFULL  
 TITLE: Method of treating HIV infection and related secondary infections with defibrotide  
 INVENTOR(S): Burcoglu, Arsinur, 213 Sweetgum Rd., Pittsburgh, PA, United States 15238  
 Wagner, Marc, 4201 Greensburg Pike, Pittsburgh, PA, United States 15221

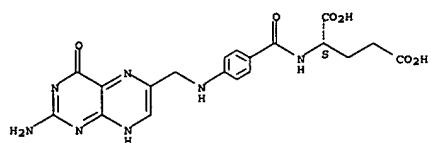
NUMBER KIND DATE  
 PATENT INFORMATION: US 5624912 19970429  
 APPLICATION INFO.: US 1994-185416 19940124 (8)  
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1991-748277, filed on 21 Aug 1991, now abandoned And Ser. No. US 1993-2395, filed on 13 Jan 1993, now abandoned

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Crouch, Deborah  
 LEGAL REPRESENTATIVE: Banner & Witcoff, Ltd.  
 NUMBER OF CLAIMS: 17  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 8 Drawing Figure(s); 6 Drawing Page(s)  
 LINE COUNT: 2148  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Oligonucleotides, polynucleotides and derivatives thereof, such as defibrotide, are agents of genetic modulation at the levels of transcription, translation, secondary messengers and cellular signal transduction systems. Such agents can be used to treat HIV infection. Preferably, treatment involves modifying the dose of such agents in response to observed fluctuations (e.g., increase, decrease, appearance, disappearance) in normal, disease and repair markers.

IT 59-30-3, Folic acid, biological studies (folate endocytic pathway; defibrotide or other oligo- or polynucleotides for treating HIV infection and related secondary infections, and dose modification with marker fluctuation)

RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)  
 Absolute stereochemistry.



L24 ANSWER 44 OF 71 USPATFULL (Continued)

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$\text{--N}^+\text{Me}_3$

IT 154294-66-3P (prepn. of, as drug-chem. modifier conjugate through physiol. cleavable linkage, for enhanced drug transport across membranes)

RN 154294-66-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2,4-diamino-6-pteridinyl)methyl]amino]benzoyl-, bis[2-(trimethylammonio)ethyl] ester, dibromide (9CI) (CA INDEX NAME)  
 Absolute stereochemistry.

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• 2 Br<sup>-</sup>

L24 ANSWER 44 OF 71 USPATFULL  
 ACCESSION NUMBER: 97:17918 USPATFULL  
 TITLE: Compositions and methods for enhanced drug delivery  
 INVENTOR(S): Hale, Ron L., Woodside, CA, United States  
 Lu, Amy, Los Altos, CA, United States  
 Solas, Dennis, San Francisco, CA, United States  
 Selick, Harold E., Belmont, CA, United States  
 Oldenburg, Kevin R., Fremont, CA, United States  
 Zaffaroni, Alejandro C., Atherton, CA, United States  
 Affymax Technologies N.V., Middlesex, England corporation

PATENT ASSIGNEE(S): (non-U.S.)  
 NUMBER KIND DATE  
 PATENT INFORMATION: US 5607691 19970304  
 APPLICATION INFO.: US 1995-449188 19950524 (8)  
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-164293, filed on 9 Dec 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-77296, filed on 14 Jun 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-898219, filed on 12 Jun 1992, now abandoned

And a continuation-in-part of Ser. No. US 1993-9463, filed on 27 Jan 1993, now abandoned

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Levy, Neil S.  
 LEGAL REPRESENTATIVE: Stevens, Lauren L.  
 NUMBER OF CLAIMS: 5  
 EXEMPLARY CLAIM: 1  
 LINE COUNT: 5349  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods of delivering pharmaceutical agents across membranes, including the skin layer or mucosal membranes of a patient. A pharmaceutical agent is covalently bonded to a chemical modifier, via a physiologically cleavable bond, such that the membrane transport and delivery of the agent is enhanced.

IT 154294-67-4 (prepn. and reaction of, in prepn. of drug-chem. modifier conjugate through physiol. cleavable bond for enhanced drug transport across membranes)

RN 154294-67-4 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2,4-diamino-6-pteridinyl)methyl]amino]benzoyl-, bis[2-(trimethylammonio)ethyl] ester (9CI) (CA INDEX NAME)  
 Absolute stereochemistry.

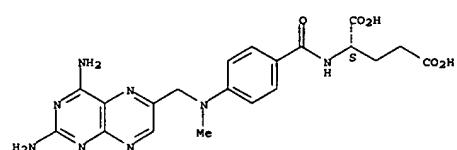
L24 ANSWER 44 OF 71 USPATFULL (Continued)

PAGE 1-B

$\text{--N}^+\text{Me}_3$

IT 59-05-2, Methotrexate (reaction of, in prepn. of drug-chem. modifier conjugate through physiol. cleavable bond for enhanced drug transport across membranes)

RN 59-05-2 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2,4-diamino-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)  
 Absolute stereochemistry.



L24 ANSWER 45 OF 71 MEDLINE  
 ACCESSION NUMBER: 97467986 MEDLINE  
 DOCUMENT NUMBER: 97467986 PubMed ID: 9327130  
 TITLE: Design and synthesis of [<sup>111</sup>In]DTPA-folate for use as a tumor-targeted radiopharmaceutical.  
 AUTHOR: Wang S; Luo J; Lentrip D A; Waters D J; Mathias C J; Green M A; Fuchs P L; Low P S  
 CORPORATE SOURCE: Department of Chemistry, Purdue University, West Lafayette, Indiana 47907, USA.  
 CONTRACT NUMBER: P30-CA23162 (NCI)  
 SOURCE: BIOCONJUGATE CHEMISTRY, (1997 Sep-Oct) 8 (5) 673-9.  
 PUB. COUNTRY: United States  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199711  
 ENTRY DATE: Entered STN: 19980109  
 Last Updated on STN: 19990129  
 Entered Medline: 19971128

AB Folate-conjugated metal chelates have been proposed as potential imaging agents for cancers that overexpress folate receptors. In a previous study, folic acid was linked through its gamma-carboxyl group to deferoxamine (DFP), and the <sup>67</sup>Ga-labeled complex ([<sup>67</sup>Ga]DF-folate) was examined for in vivo tumor targeting efficiency in athymic mice with a human tumor cell implant. Although superb tumor-to-background contrast was obtained, slow hepatobiliary clearance would compromise imaging of abdominal tumors such as ovarian cancer. In the present study, folic acid was conjugated to an alternative chelator, diethylenetriaminepentacetic acid (DTPA), via an ethylenediamine spacer. The desired DTPA-folate (gamma) regioisomer was synthesized by two different approaches, purified by reversed phase column chromatography, and characterized mainly by analytical HPLC, mass spectroscopy, and NMR. In cultured tumor cells, uptake of [<sup>111</sup>In]DTPA-folate (gamma) was found to be specific for folate receptor-bearing cells, and the kinetics of uptake were similar to those of free folate and other folate-conjugated molecules. In the normal rat, intravenously administered [<sup>111</sup>In]DTPA-folate (gamma) was found to be rapidly excreted into the urine, giving intestinal levels of radiotracer 10-fold lower than those observed with (<sup>67</sup>Ga)DF-folate (gamma) at 4 h. In a preliminary mouse imaging study, a folate receptor-positive KB cell tumor was readily visualized by gamma scintigraphy 1 h following intravenous administration of [<sup>111</sup>In]DTPA-folate (gamma).

L24 ANSWER 46 OF 71 USPATFULL  
 ACCESSION NUMBER: 96108664 USPATFULL  
 TITLE: In vivo binding pair pretargeting  
 INVENTOR(S): Pomato, Nicholas, Frederick, MD, United States  
 McCabe, Richard P., West Chester, PA, United States  
 Hawkins, Gregory A., Hastings, NE, United States  
 Bredehorst, Reinhard, Hamburg, Germany, Federal Republic of  
 Kim, Chong-Ho, Rockville, MD, United States  
 Vogel, Carl-Wilhelm E., Hamburg, Germany, Federal Republic of  
 PATENT ASSIGNEE(S): Akzo N.V., Arnhem, Netherlands (non-U.S. corporation)

NUMBER	KIND	DATE
US 5578289		19961126
WO 9317707		19930916
APPLICATION INFO.:		
US 1993-140186		19931104 (8)
WO 1993-US1858		19930303
		19931104 PCT 371 date
		19931104 PCT 102(e) date

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1992-846453, filed on 4 Mar 1992, now abandoned

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Ceperley, Mary E.  
 LEGAL REPRESENTATIVE: Blackstone, William M., Gormley, Mary E.  
 NUMBER OF CLAIMS: 11  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 14 Drawing Figure(s); 13 Drawing Page(s)  
 LINE COUNT: 995

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

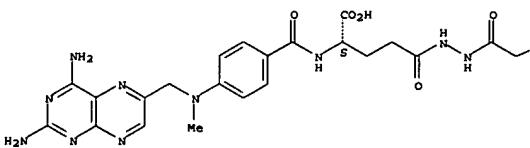
AB A method for in-vivo targeting a functional moiety in a patient by administering a targeting moiety coupled to an affinity component, wherein the targeting moiety has affinity for binding sites in a target area, and administering a binding partner to the affinity component coupled to a functional moiety to localize the functional moiety in the target area. Preferably the targeting moiety is an antibody and the functional moiety is a radiometal when performing in vivo imaging or therapy. The affinity component may be a novel methotrexate analog.

IT 151395-94-7DP, 111-In complexes  
 (binding pair pretargeting with targeting moiety-affinity component conjugate and affinity component binding partner-functional moiety conjugate, and conjugate prepn.)  
 RN 151395-94-7 USPATFULL  
 CN 3,6,9,12,13-Pentaazaocadecanedioic acid,  
 3,6,9-tris(carboxymethyl)-17-[4-  
 [(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]amino]-11,14-  
 dioxo-, (17S)- (9CI) (CA INDEX NAME)

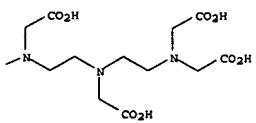
Absolute stereochemistry.

L24 ANSWER 46 OF 71 USPATFULL (Continued)

PAGE 1-A



PAGE 1-B



IT 59-05-2D, Methotrexate, effector mol. conjugates  
 (binding pair pretargeting with targeting moiety-affinity component conjugate and affinity component binding partner-functional moiety conjugate, and conjugate prepn.)

RN 59-05-2 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo

yl]-, (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 151395-94-7P  
 (prep. and reaction; binding pair pretargeting with targeting moiety-affinity component conjugate and affinity component binding partner-functional moiety conjugate, and conjugate prepn.)

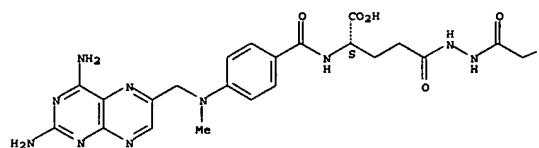
RN 151395-94-7 USPATFULL  
 CN 3,6,9,12,13-Pentaazaocadecanedioic acid,

3,6,9-tris(carboxymethyl)-17-[(4-  
 [(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]amino]-11,14-

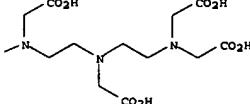
L24 ANSWER 46 OF 71 USPATFULL (Continued)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IT 79640-69-0  
 (reaction; binding pair pretargeting with targeting moiety-affinity component conjugate and affinity component binding partner-functional moiety conjugate, and conjugate prepn.)

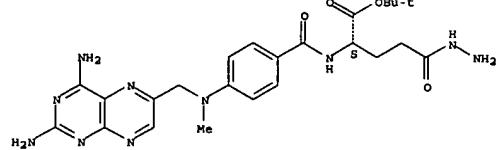
RN 79640-69-0 USPATFULL

CN L-Glutamic acid,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo

yl]-, 1-(1,1-dimethylethyl) ester, 5-hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 47 OF 71 USPATFULL  
 ACCESSION NUMBER: 96-82464 USPATFULL  
 TITLE: Delivery of therapeutic agents to receptors using polysaccharides  
 INVENTOR(S): Groman, Ernest V., Brookline, MA, United States  
 Menz, Edward T., Quincy, MA, United States  
 Enriguez, Philip M., Sheldonville, MA, United States  
 Jung, Chu, Arlington, MA, United States  
 Lewis, Jerome M., Newton, MA, United States  
 Josephson, Lee, Arlington, MA, United States  
 Advanced Magnetics, Inc., Cambridge, MA, United States  
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5554386	19960910	
APPLICATION INFO.:	US 1994-260551	19940616 (8)	
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-900686, filed on 17 Jun 1992, now patented, Pat. No. US 5478576		

which is a continuation-in-part of Ser. No. US 1992-936873, filed on 27 Aug 1992, now patented, Pat. No. US 5336506

which is a continuation of Ser. No. US 1990-630017, filed on 19 Dec 1990, now abandoned which is a continuation-in-part of Ser. No. US 1991-679526, filed on 2 Apr 1991, now patented, Pat. No. US 5141739 which is a continuation of Ser. No. US 1989-384991, filed on 2 Jul 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-228640, filed on 4 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-67586, filed on 26 Jun 1987, now patented, Pat. No. US 4827945

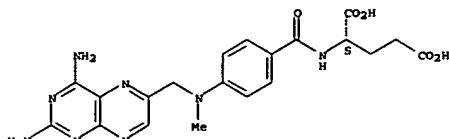
which is a continuation-in-part of Ser. No. US 1986-882044, filed on 3 Jul 1986, now patented, Pat. No. US 4770183  
 DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Kishore, Gollamudi S.  
 LEGAL REPRESENTATIVE: Bromberg & Sunstein  
 NUMBER OF CLAIMS: 17  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)  
 LINE COUNT: 1061

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB This invention relates to a method of directing a therapeutic agent to selected cells, wherein a complex is formed between a polysaccharide capable of interacting with a cell receptor and a therapeutic agent.

The resulting complex is administered to a subject, and permitted to be internalized into the selected cells through a process known as receptor mediated endocytosis (RME). The polysaccharide may be, for example, arabinogalactan, gum arabic, mannan or hydrolysis products thereof; the therapeutic agent may be, for example, an antiviral agent, a nucleic acid, hormone, steroid, antibody, chemoprotective or radioprotective agent. The cell receptor may be, for example, the asialoglycoprotein

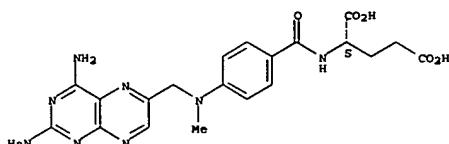
L24 ANSWER 47 OF 71 USPATFULL (Continued)  
 receptor or the mannose receptor.  
 IT 59-05-2, Methotrexate  
 (drug delivery to receptors using polysaccharides)  
 RN 59-05-2 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 59-05-2DP, Methotrexate, reaction products with polysaccharides  
 (drug delivery to receptors using polysaccharides)  
 RN 59-05-2 USPATFULL  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 48 OF 71 USPATFULL  
 ACCESSION NUMBER: 96-65493 USPATFULL  
 TITLE: Nucleophilic poly-substituted aryl acridinium ester conjugates useful thereof  
 INVENTOR(S): Lew, Say-Jong, Westwood, MA, United States  
 Chang, Steve C. S., Franklin, MA, United States  
 Klukas, Carol K., Pittsburgh, PA, United States  
 Vitkauskas, Christine A., North Attleboro, MA, United States  
 PATENT ASSIGNEE(S): Ciba Corning Diagnostics Corp., Medfield, MA, United States (U.S. corporation)

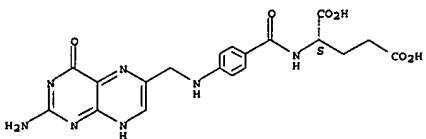
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5538901	19960723	
APPLICATION INFO.:	US 1994-292946	19940818 (8)	
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-32085, filed on 17 Mar 1993, now abandoned which is a division of Ser. No. US 1992-871601, filed on 17 Apr 1992, now patented, Pat. No. US 5241070, issued on 13 Aug 1993 which is a continuation of Ser. No. US 1988-249620, filed on 26 Sep 1988, now abandoned		

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Spiegel, Carol A.  
 LEGAL REPRESENTATIVE: Morgenstern, Arthur S., Roesler, Judith A.  
 NUMBER OF CLAIMS: 15  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 18 Drawing Figure(s); 15 Drawing Page(s)  
 LINE COUNT: 1444

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB This invention is directed to the novel assay methods utilizing nucleophilic poly-substituted aryl acridinium ester conjugates as the tracers. Conjugates prepared by covalent coupling of novel nucleophilic poly-substituted aryl acridinium esters with biological compounds including small organic molecules such as Vitamin B12, folic acid, cortisol, estradiol, and thromboxane B2, were found useful in the development of highly sensitive assays for the analytes of diagnostic interest.

IT 59-30-3, analysis  
 (detn. of, with folate-acridinium ester deriv. conjugate)  
 RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

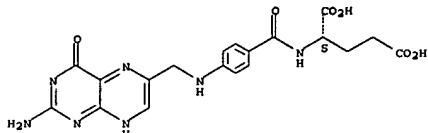
Absolute stereochemistry.



IT 59-30-3DP, derivs., conjugates with acridinium ester derivs.

L24 ANSWER 48 OF 71 USPATFULL (Continued)  
 (prepn. of, for folate detn.)  
 RN 59-30-3 USPATFULL  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 49 OF 71 USPATFULL  
 ACCESSION NUMBER: 96160704 USPATFULL  
 TITLE: 5,10,-methylene-tetrahydrofolate as a modulator of a chemotherapeutic agent  
 INVENTOR(S): Spears, Colin P., Glendale, CA, United States  
 Gustavsson, Bengt G., Gothenburg, Sweden  
 PATENT ASSIGNEE(S): University of Southern California, Los Angeles, CA, United States (U.S. corporation)

PATENT INFORMATION: NUMBER KIND DATE  
 APPLICATION INFO.: US 5534519 19960709  
 RELATED APPLN. INFO.: US 1994-326414 19941020 (8)  
 Division of Ser. No. US 1993-174571, filed on 23 Dec 1993, now patented. Pat. No. US 5376658 which is a continuation of Ser. No. US 1991-789729, filed on 12 Nov 1991, now abandoned which is a

continuation-in-part of Ser. No. US 1990-521712, filed on 11 May 1990, now abandoned

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Criares, Theodore J.

NUMBER OF CLAIMS: 12

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT: 1440

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the compound 5,10-methylene-tetrahydrofolate (CH<sub>2</sub>.sub.2 PH<sub>2</sub>.sub.4), and its solution product isomer

PH<sub>2</sub>.sub.4, therapeutic uses of these compounds, and compositions thereof.

CH<sub>2</sub>.sub.2 PH<sub>2</sub>.sub.4 and PH<sub>2</sub>.sub.4 strongly modulate the in vivo antitumor

effects of 5-Fluorouracil.

IT 59-30-3, Folic acid, biological studies

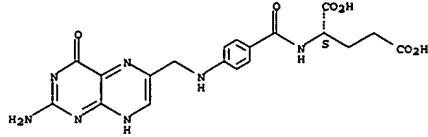
(deficiency of, treatment of, methylenetetrahydrofolate for)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-

-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 59-05-2, Methotrexate  
 (toxicity of, methylenetetrahydrofolate for decrease of)

RN 59-05-2 USPATFULL

L24 ANSWER 50 OF 71 USPATFULL  
 ACCESSION NUMBER: 941113021 USPATFULL  
 TITLE: 5,10-methylene-tetrahydrofolate as a modulator of a chemotherapeutic agent  
 INVENTOR(S): Spears, Colin P., Glendale, CA, United States  
 Gustavsson, Bengt G., Gothenburg, Sweden  
 PATENT ASSIGNEE(S): University of Southern California, Los Angeles, CA, United States (U.S. corporation)

PATENT INFORMATION: NUMBER KIND DATE  
 APPLICATION INFO.: US 5376658 19941227  
 RELATED APPLN. INFO.: US 1993-174571 19931223 (8)  
 Continuation of Ser. No. US 1991-789729, filed on 12 Nov 1991, now abandoned which is a

continuation-in-part of Ser. No. US 1990-521712, filed on 11 May 1990, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Cintins, Marianne M.

ASSISTANT EXAMINER: Criares, T. J.

LEGAL REPRESENTATIVE: Robbins, Berliner & Carson

NUMBER OF CLAIMS: 26

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT: 1614

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the compound 5,10-methylene-tetrahydrofolate (CH<sub>2</sub>.sub.2 PH<sub>2</sub>.sub.4), and its solution product isomer

PH<sub>2</sub>.sub.4, therapeutic uses of these compounds, and compositions thereof.

CH<sub>2</sub>.sub.2 PH<sub>2</sub>.sub.4 and PH<sub>2</sub>.sub.4 strongly modulate the in vivo antitumor

effects of 5-Fluorouracil.

IT 59-30-3, Folic acid, biological studies

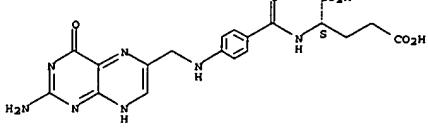
(deficiency of, treatment of, methylenetetrahydrofolate for)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-

-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 59-05-2, Methotrexate  
 (toxicity of, methylenetetrahydrofolate for decrease of)

RN 59-05-2 USPATFULL

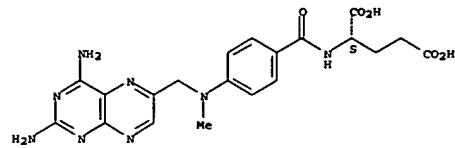
CN L-Glutamic acid,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]amino]benzo

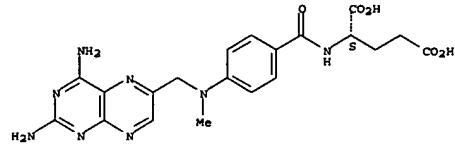
y1]- (9CI) (CA INDEX NAME)

L24 ANSWER 49 OF 71 USPATFULL (Continued)  
 CN L-Glutamic acid,  
 N-[4-[(2,4-diamino-6-pteridinyl)methyl]amino]benzo  
 y1]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 50 OF 71 USPATFULL (Continued)  
 Absolute stereochemistry.



L24 ANSWER 51 OF 71 USPATFULL  
 ACCESSION NUMBER: 94:68598 USPATFULL  
 TITLE: Targeting of therapeutic agents using polysaccharides  
 INVENTOR(S): Josephson, Lee, Arlington, MA, United States  
 Groman, Ernest V., Brookline, MA, United States  
 Jung, Chu, Arlington, MA, United States  
 Lewis, Jerome M., Newton, MA, United States  
 PATENT ASSIGNEE(S): Advanced Magnetic Inc., Cambridge, MA, United States  
 (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5336506 19940809  
 APPLICATION INFO.: US 1992-936873 19920827 (7)  
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1990-630017, filed on 19 Dec 1990, now abandoned which is a continuation-in-part of Ser. No. US 1991-679526, filed on 2 Apr 1991, now patented, Pat. No. US 5141739 And a continuation-in-part of Ser. No. US 1989-384991, filed on 2 Jul 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-328640, filed on 4 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-67586, filed on 26 Jun 1987, now patented, Pat. No. US 4827945

which is a continuation-in-part of Ser. No. US 1986-882044, filed on 3 Jul 1986, now patented, Pat. No. US 4770183

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Kishore, G. S.  
 LEGAL REPRESENTATIVE: Bromberg & Sunstein  
 NUMBER OF CLAIMS: 13  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 544

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a method for the targeting of a therapeutic agent to a specific population of cells, wherein a complex is formed between the therapeutic agent and a polysaccharide capable of interacting with a cell receptor, and wherein the resulting complex is internalized into the cell by receptor mediated endocytosis (RME). In one embodiment of the invention, a complex of a therapeutic agent containing iron and the polysaccharide arabinogalactan may be formed

and used to deliver iron specifically to hepatocytes by RME.

IT 59-05-2, Methotrexate (drug delivery to receptors using polysaccharides)

RN 59-05-2 USPATFULL

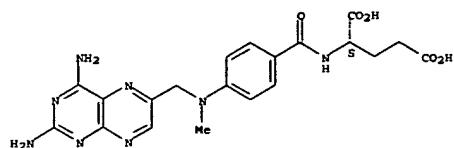
CN L-Glutamic acid,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo

yll- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 51 OF 71 USPATFULL (Continued)



IT 59-05-2DP, Methotrexate, reaction products with polysaccharides

(drug delivery to receptors using polysaccharides)

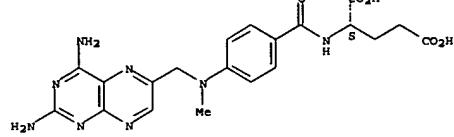
RN 59-05-2 USPATFULL

CN L-Glutamic acid,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo

yll- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 52 OF 71 USPATFULL  
 ACCESSION NUMBER: 94:44559 USPATFULL  
 TITLE: Catalytic and reactive polypeptides and methods for their preparation and use  
 INVENTOR(S): Schultz, Peter, Oakland, CA, United States  
 PATENT ASSIGNEE(S): The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

L24 ANSWER 52 OF 71 USPATFULL (Continued)

NUMBER KIND DATE

PATENT INFORMATION: US 514817 19940524  
 APPLICATION INFO.: US 1992-988652 19921210 (7)  
 RELATED APPLN. INFO.: Division of Ser. No. US 1989-404920, filed on 8 Sep 1989, now patented, Pat. No. US 5215889 which is a continuation-in-part of Ser. No. US 1988-273455, filed on 18 Nov 1988, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Patterson, Jr., Charles L.

LEGAL REPRESENTATIVE: Townsend and Townsend Khourie and Crew

NUMBER OF CLAIMS: 3

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 26 Drawing Figure(s); 19 Drawing Page(s)

LINE COUNT: 2126

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Catalytic and reactive polypeptides include a binding site specific for a reactant or reactive intermediate involved in a chemical reaction of interest. The polypeptides further include at least one active functionality proximate the binding site, where the active

functionality is capable of catalyzing or chemically participating in the chemical reaction in such a way that the reaction rate is enhanced. Methods for preparing the catalytic peptides include chemical synthesis, site-directed mutagenesis of antibody and enzyme genes, covalent attachment of the functionalities through particular amino acid side chains, and the like.

This invention was made with Government support under Grant Contract

No. AI-24695, awarded by the Department of Health and Human Services, and under Grant Contract No. N 00014-87-K-0256, awarded by the Office of Naval Research. The Government has certain rights in this invention.

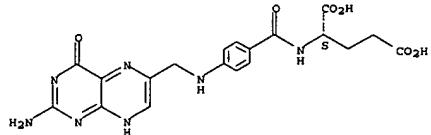
IT 59-30-3, biological studies

(cofactor for, catalytic antibodies)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 53 OF 71 USPATFULL  
 ACCESSION NUMBER: 94:30969 USPATFULL  
 TITLE: Catalytic and reactive polypeptides and methods for their preparation and use  
 INVENTOR(S): Schultz, Peter, Oakland, CA, United States  
 PATENT ASSIGNEE(S): Regents of the University of California, Berkeley, CA, United States (U.S. corporation)

NUMBER KIND DATE  
 -----  
 PATENT INFORMATION: US 5302516 19940412  
 APPLICATION INFO.: US 1992-988643 19921210 (7)  
 DISCLAIMER DATE: 20100601  
 RELATED APPN. INFO.: Continuation of Ser. No. US 1989-404920, filed on 8 Sep

1989 which is a continuation-in-part of Ser. No. US 1988-273455, filed on 18 Nov 1988, now abandoned

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Patterson, Jr., Charles L.  
 LEGAL REPRESENTATIVE: Townsend and Townsend Khourie and Crew  
 NUMBER OF CLAIMS: 7  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 26 Drawing Figure(s); 19 Drawing Page(s)  
 LINE COUNT: 2230

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Catalytic and reactive polypeptides include a binding site specific for a reactant or reactive intermediate involved in a chemical reaction of interest. The polypeptides further include at least one active functionality proximate the binding site, where the active functionality

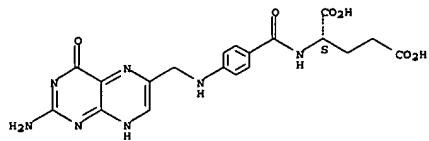
is capable of catalyzing or chemically participating in the chemical reaction in such a way that the reaction rate is enhanced. Methods for preparing the catalytic peptides include chemical synthesis, site-directed mutagenesis of antibody and enzyme genes, covalent attachment of the functionalities through particular amino acid side chains, and the like.

IT 59-30-3, biological studies (cofactor for, catalytic antibodies)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 54 OF 71 USPATFULL  
 ACCESSION NUMBER: 94:12523 USPATFULL  
 TITLE: Difluoroglutamic acid conjugates with folates and anti-folates for the treatment of neoplastic diseases  
 INVENTOR(S): Bey, Philippe, Cincinnati, OH, United States  
 Coward, James K., Ann Arbor, MI, United States  
 McGuire, John J., Kenmore, NY, United States  
 PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)  
 Health Research, Inc., Buffalo, NY, United States (U.S. corporation)

NUMBER KIND DATE  
 -----

PATENT INFORMATION: US 526726 19940215  
 APPLICATION INFO.: US 1990-508873 19900412 (7)

DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted

PRIMARY EXAMINER: Davis, Donald G.

LEGAL REPRESENTATIVE: Mack, Anna E., Dunn, Michael L.

NUMBER OF CLAIMS: 6

EXEMPLARY CLAIM: 1

LINE COUNT: 625

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to certain conjugates of folates and anti-folates with difluoroglutamic acid which are useful in the treatment of patients suffering from certain neoplastic diseases including leukemia, melanomas, carcinomas, sarcomas and mixed neoplasias.

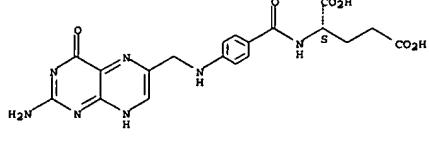
IT 59-30-3DP, difluoroglutamic acid-contg. analogs

(prepn. of, for treatment of tumors and/or psoriasis)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 53 OF 71 USPATFULL (Continued)

ACCESSION NUMBER: 1994:229683 CAPLUS  
 DOCUMENT NUMBER: 120:239683  
 TITLE: Preparation of controlled-size inorganic particles for

use in separations, assays, as magnetic molecular switches, and as inorganic liposomes for medical applications

INVENTOR(S): Chagnon, Mark S.; Carter, Michelle J.; Ferris, John R.; Gray, Maria A.; Hamilton, Tracy J.; Rudd, Edwin

A.

PATENT ASSIGNEE(S): Molecular Bioquest, Inc., USA

SOURCE: PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9326019 A1 19931223 WO 1993-US5595 19930608

W, CA, JP  
 RW: AT, BE, CH, DE, DK, ES, PR, GB, GR, IE, IT, LU, MC, NL, PT, SE

US 5935866 A 19900810 US 1992-894260 19920608

US 5389277 A 19950214 US 1992-958646 19921007

US 5441746 A 19950815 US 1993-57687 19930505

EP 645048 A1 19950329 EP 1993-915304 19930608

R: DE, FR, GB, SE  
 JP 08500700 T2 19960123 JP 1993-501742 19930608

PRIORITY APPLN. INFO.: US 1992-994260 19920608

US 1992-911962 19920710

US 1992-958646 19921007

US 1993-57687 19930505

US 1989-455071 19891222

US 1990-556169 19900810

US 1990-566169 19900810

WO 1993-US5595 19930608

AB Inorg. oxides of substantially uniform particle size distribution are prepd. by contacting eq. solns. of an inorg. salt and an inorg. base across a porous membrane, wherein the membrane contains pores which allow for pptn. of a substantially monodispersed size of inorg. oxide particles on one side of the membrane and pptn. of a salt of the corresponding base on a second side of the membrane. The prepd. particles can be coated with an organo-metallic polymer having attached thereto an org. functionality to which a variety of org. and/or biol. mole. can be coupled. The coupled

particles may be used for in vitro or in vivo systems involving seprn. steps or the directed movement of coupled mol., to particular sites, including immuno-assays, other biol. assays, biochemical or enzymic reactions, affinity chromatog., purifn., cell sorting, and diagnostic and therapeutic uses. In a further embodiment, described herein are liposomes which comprise the substantially uniform size inorg. core coated with an amphiphilic vesicle-forming lipid. Also disclosed are novel ph lipid compds. which serve as the vesicle-forming lipid. When the magnetic particles are electromagnetic wave-absorbing surface-modified particles, such particles provide for the prepn. of liposome compns. which offer a method for the treatment of cancer, as well as infectious diseases. Electromagnetic wave-absorbing ferrites were prepd. by the hydroxide gel

L24 ANSWER 55 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)  
process from FeCl<sub>3</sub>, CaCl<sub>2</sub>, and ZnCl<sub>2</sub> or from FeCl<sub>3</sub>, FeCl<sub>2</sub>, and MnCl<sub>2</sub>  
using

NaOH and O<sub>2</sub>. The ferrite particles were coated with oleic acid and then treated with a second layer of Ph lipid prep'd. from 5-aminoisophthalic acid and methoxypolyoxyethylene imidazolyl carbonyl. The lipid-coated ferrites and uncoated ferrites (controls) were incubated with MDCK cells grown above a colony of rat neuroblastoma cells and then exposed to a frequency of 20,000 mHz for 3 min. None of the bare ferrite particles were permeable to the MDCK membrane and so had no effect on the cancer cells; the lipid-coated ferrites were permeable, heated up upon exposure to the electromagnetic wave, and killed all the cancer cells.

Lipid-coated ferrites (contg. all Fe) that did not absorb electromagnetic waves were able to cross the cell barrier but were unable to kill the neuroblastoma cells.

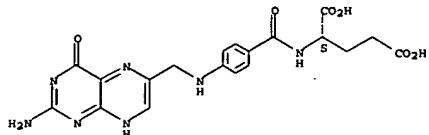
IT 59-30-3, Folate, analysis

RL: ANT (Analyte); ANST (Analytical study)  
(detn. of, by immunoassay using inorg. oxide particles coated with organometallic polymer functionalized to bind antibodies)

RN 59-30-3 CAPLUS

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 56 OF 71 USPATFULL  
ACCESSION NUMBER: 93:72216 USPATFULL  
TITLE: Nucleophilic polysubstituted aryl acridinium esters  
and

INVENTOR(S): Law, Say-Jong, Westwood, MA, United States  
PATENT ASSIGNEE(S): Ciba Corning Diagnostics Corp., Medfield, MA, United States (U.S. corporation)

NUMBER KIND DATE  
----- -----  
PATENT INFORMATION: US 5241070 19930831  
APPLICATION INFO.: US 1992-071601 19920417 (7)  
DISCLAIMER DATE: 20070417  
RELATED APPLN. INFO.: Continuation of Ser. No. US 1988-249620, filed on 26 Sep 1988, now abandoned

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Daus, Donald G.

LEGAL REPRESENTATIVE: Morgenstern, Arthur S.; Slepchuk, Jr., Nicholas I.

NUMBER OF CLAIMS: 3  
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 18 Drawing Figure(s); 15 Drawing Page(s)

LINE COUNT: 1023  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is directed to novel nucleophilic polysubstituted aryl acridinium esters and to novel conjugates thereof. The novel nucleophilic polysubstituted aryl acridinium esters and novel conjugates

thereof are useful in biological assays, including novel assays for the determination of Vitamin B<sub>sub</sub>12, folate, cortisol, estradiol, and thromboxane B<sub>sub</sub>2.

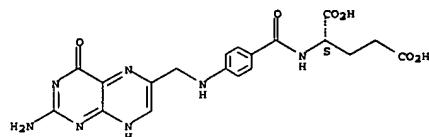
IT 59-30-3, analysis

(detn. of, with folate-acridinium ester deriv. conjugate)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



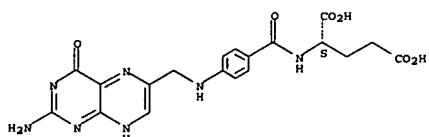
IT 59-30-3DP, derivs., conjugates with acridinium ester derivs.  
(prepn. of, for folate detn.)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

L24 ANSWER 56 OF 71 USPATFULL (Continued)

Absolute stereochemistry.



L24 ANSWER 57 OF 71 USPATFULL  
ACCESSION NUMBER: 93:44127 USPATFULL  
TITLE: Catalytic and reactive polypeptides and methods for their preparation and use

INVENTOR(S): Schultz, Peter, Oakland, CA, United States  
PATENT ASSIGNEE(S): The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

NUMBER KIND DATE  
----- -----  
PATENT INFORMATION: US 5215889 19930601  
APPLICATION INFO.: US 1989-404920 19890908 (7)  
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1988-273455, filed on 18 Nov 1988

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Patterson, Jr., Charles L.

LEGAL REPRESENTATIVE: Townsend and Townsend

NUMBER OF CLAIMS: 19  
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 22 Drawing Figure(s); 19 Drawing Page(s)

LINE COUNT: 2248  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Catalytic and reactive polypeptides include a binding site specific for a reactant or reactive intermediate involved in a chemical reaction of interest. The polypeptides further include at least one active functionality proximate the binding site.

This invention was made with Government support under Grant Contract No. AI-24695 awarded by the Department of Health and Human Services, under Grant Contract No. N 00014-87-K-0256, awarded by the Office of Naval Research. The Government has certain rights in this invention, under Grant Contract CBE 8822412 awarded by the National Science Foundation, and under Grant Subcontract C87-101226 awarded by the Department of Energy.

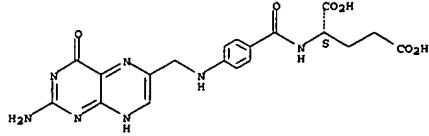
IT 59-30-3, biological studies

(cofactor for, catalytic antibodies)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



## L24 ANSWER 58 OF 71 USPATFULL

ACCESSION NUMBER: 93104975 USPATFULL  
 TITLE: Stable injectable pharmaceutical formulation for folic acid and leucovorin salts and method  
 INVENTOR(S): Haeger, Bruce E., Highland Mills, NY, United States  
 PATENT ASSIGNEE(S): American Cyanamid Company, Stamford, CT, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5173488 19921222  
 APPLICATION INFO.: US 1991-696335 19910501 (7)  
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1989-396573, filed on 21

Aug 1989, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Bond, Robert T.

LEGAL REPRESENTATIVE: Szatkowski, Thomas S.

NUMBER OF CLAIMS: 20

EXEMPLARY CLAIM: 1

LINE COUNT: 943

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Injectable aqueous compositions comprising folic acid and leucovorin and their salts, optionally including benzyl alcohol, sodium chloride and agents for adjusting pH are stabilized and buffered in the range of 6

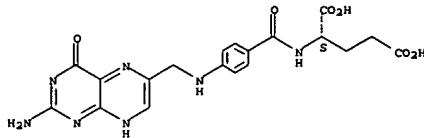
to 10 by adding a combination of tromethamine and monothioglycerol. Such compositions remain stable for prolonged periods even when exposed to sunlight.

IT 59-30-3D, Folic acid, salts 6484-89-5, Sodium folate (injection formulations contg. leucovorin and)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 6484-89-5 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 59 OF 71 USPATFULL

ACCESSION NUMBER: 9278877 USPATFULL  
 TITLE: Methods, compounds, and compositions for immunosuppression  
 INVENTOR(S): Ando, Dale G., Walnut Creek, CA, United States  
 Levenson, Corey H., Oakland, CA, United States  
 Braude, Irwin, Vallejo, CA, United States  
 Cetus Corporation, Emeryville, CA, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5149688 19920922  
 APPLICATION INFO.: US 1990-513983 19900424 (7)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Waddell, Frederick E.

ASSISTANT EXAMINER: Pay, Zohreh A.

LEGAL REPRESENTATIVE: Bortner, Scott R., Giotta, Gregory J., Wong, Wean Khing

NUMBER OF CLAIMS: 2

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 15 Drawing Figure(s); 15 Drawing Page(s)

LINE COUNT: 1044

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is in the area of immunology, and specifically relates to immunopharmacology as applied to the development of immunosuppressive compositions and methods of use thereof for treating a wide variety of diseases arising from abnormal or undesirable normal immune responses.

Compositions and methods of using the same that are particularly useful in treating autoimmune diseases are shown.

IT 59-05-2, Methotrexate 59-05-2D, Methotrexate, derivs.

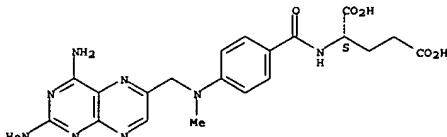
59-30-3D, Folic acid, analogs (acetocetylcarboxylic acid or succinylacetone combined with, as immunosuppressant)

RN 59-05-2 USPATFULL

CN L-Glutamic acid,

N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

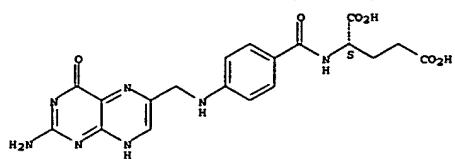


RN 59-05-2 USPATFULL

CN L-Glutamic acid, N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzo yl- (9CI) (CA INDEX NAME)

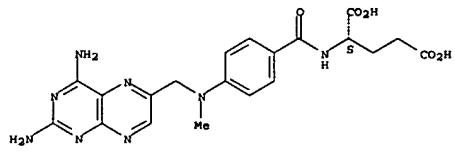
Absolute stereochemistry.

## L24 ANSWER 58 OF 71 USPATFULL (Continued)



● Na

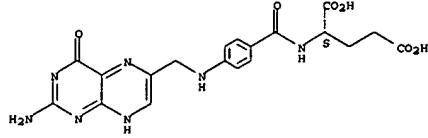
## L24 ANSWER 59 OF 71 USPATFULL (Continued)



RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



Absolute stereochemistry.

L24 ANSWER 60 OF 71 USPATFULL  
 ACCESSION NUMBER: 91:94726 USPATFULL  
 TITLE: Difluoroglutamic acid conjugates with folates and anti-folates for the treatment of neoplastic diseases  
 INVENTOR(S): Bey, Philippe, Cincinnati, OH, United States  
 Kolb, H. Michael, Cincinnati, OH, United States  
 PATENT ASSIGNEE(S): Merrell Dow Pharmaceuticals Inc., Cincinnati, OH, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5066828	19911119	
APPLICATION INFO.:	US 1990-508874	19900412 (7)	
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Reamer, James H.		
LEGAL REPRESENTATIVE:	Neebitt, Stephen L.		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1		
LINE COUNT:	594		

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

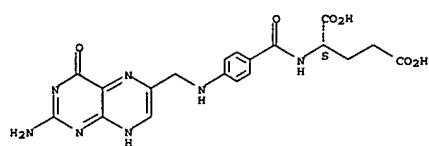
AB This invention relates to certain conjugates of folates and antifolates with difluoroglutamic acid which are useful in the treatment of patients suffering from certain neoplastic diseases including leukemias, melanomas, carcinomas, sarcomas and mixed neoplasias.

IT 59-30-3DP, conjugates with difluoroglutamic acid derivs., preparation (prepn. of)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.



L24 ANSWER 61 OF 71 USPATFULL  
 ACCESSION NUMBER: 90:54554 USPATFULL  
 TITLE: Assay for sulphydryl amino acids and methods for detecting and distinguishing cobalamin and folic acid deficiency  
 INVENTOR(S): Allen, Robert H., Englewood, CO, United States  
 Stabler, Sally P., Denver, CO, United States  
 Lindenbaum, John, New York, NY, United States  
 PATENT ASSIGNEE(S): University Patents, Inc., Westport, CT, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4940658	19900710	
APPLICATION INFO.:	US 1986-933553	19861120 (6)	
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Keplinger, Esther M.		
ASSISTANT EXAMINER:	Scheiner, Toni R.		
LEGAL REPRESENTATIVE:	Yahwak & Associates		
NUMBER OF CLAIMS:	34		
EXEMPLARY CLAIM:	18		
NUMBER OF DRAWINGS:	7 Drawing Figure(s); 7 Drawing Page(s)		
LINE COUNT:	2375		

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Method for determining levels of sulphydryl amino acids, particularly total homocysteine levels in samples of body tissue from warm-blooded animals, methods of detecting cobalamin and folic acid deficiency using an assay for total homocysteine levels, and methods for distinguishing cobalamin from folic acid deficiency using an assay for total homocysteine levels in conjunction with an assay for methylmalonic acid.

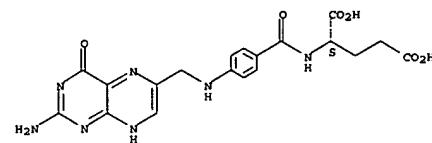
IT 59-30-3, Folic acid, biological studies

(deficiency of, homocysteine and methylmalonate detn. in diagnosis of)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.



L24 ANSWER 62 OF 71 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1989:127583 CAPLUS  
 DOCUMENT NUMBER: 110:127583  
 TITLE: Preparation and properties of yttrium and heavy lanthanide complexes with folic acid  
 AUTHOR(S): Brzyka, Wanda; Ozga, Wanda  
 CORPORATE SOURCE: Inst. Chem., Univ. Mari Curie-Sklodowska, Lublin, Pol.  
 SOURCE: Biul. Lubel. Tow. Nauk., Mat.-Fiz.-Chem. (1988), Volume Date 1985, 27(1), 43-51  
 CODEN: BLTMKD; ISSN: 0460-2366  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Polish

AB The formation conditions of Y and heavy lanthanide complexes with folic acid were studied, their compn. and solv. in water at 298 K was detd. and IR and x-ray spectra were recorded. The conditions and products of the thermal decomp. of the obtained complexes in air were examed. Complexes of Y and heavy lanthanides with folic acid with the molar ratio of metal-ligand of 2:3 were prep'd. as x-ray amorphous hydrates having 15 mole. of crystn. water. They were very sparingly sol. in H<sub>2</sub>O, their solv. being of the order of 10<sup>-5</sup>-10<sup>-6</sup> mol·dm<sup>-3</sup>. On heating, the hydrates lose crystn. water mole. and form anhyd. salts, which decomp.

to Ln<sub>2</sub>O<sub>3</sub> (Ln = Y, Gd, Dy, Ho, Er, Tm, Yb, Lu) and Tb<sub>4</sub>O<sub>7</sub>.

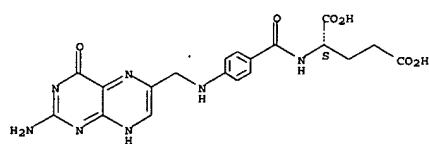
IT 59-30-3DP, rare earth metal complexes

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and thermal decomp. and IR spectrum of)

RN 59-30-3 CAPLUS

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.



L24 ANSWER 63 OF 71 USPATFULL  
 ACCESSION NUMBER: 87:41588 USPATFULL  
 TITLE: Compositions and method for simultaneous multiple array  
 INVENTOR(S): Olson, Douglas R., Doylestown, PA, United States  
 PATENT ASSIGNEE(S): ION Micromedic Systems, Inc., Costa Mesa, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4672028	19870609	
APPLICATION INFO.:	US 1984-612979	19840523 (6)	
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Nucker, Christine M.		
LEGAL REPRESENTATIVE:	Lyon & Lyon		
NUMBER OF CLAIMS:	47		
EXEMPLARY CLAIM:	1		
LINE COUNT:	784		

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

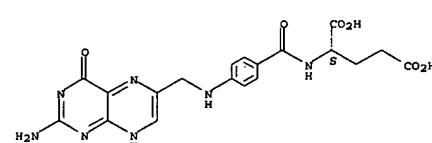
AB Compounds useful in a simultaneous multiple assay for analytes such as steroids, proteins, peptides, carbohydrates or drugs. The compound or compounds are prepared by labelling an individual analyte with a radioisotope through a chelating agent to form a coordinated compound. The assay uses one or more chelated labelled analytes with one or more labelled analytes wherein each radioisotope is different.

IT 59-30-3, analysis (detn. of, in simultaneous multiple RIAs, metal isotope chelate labels for)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.



## L24 ANSWER 64 OF 71 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1985:2459 CAPLUS

DOCUMENT NUMBER: 102:2459

TITLE: Studies on the nature of transition-metal  
-ion-mediated binding of triazine dyes to enzymes.

The

interaction of Procion Red MX-8B with

carboxypeptidase

G-2

AUTHOR(S): Hughes, Peter; Sherwood, Roger F.; Lowe, Christopher R.

CORPORATE SOURCE: Microb. Technol. Lab., Serv. Cent. Appl. Microbiol. Res., Porton Down, UK

SOURCE: Eur. J. Biochem. (1984), 144(1), 135-42

CODEN: EJBCAI; ISSN: 0014-2956

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Several reactive azoic dichlorotriazinyl dyes specifically and irreversibly inactivate the folate-degrading enzyme carboxypeptidase G-2 (I) at a site competitive with methotrexate (4-amino-N10-methylfolate) and p-aminobenzoyl-L-glutamate. Although the less reactive monochlorotriazinyl dye, Procion Red H-BBN, was unable to inactivate I, it was capable of marked inhibition of inactivation by dichlorotriazinyl dyes in the presence of Zn<sup>2+</sup>, Zn<sup>2+</sup>, and to a lesser extent other 1st row transition metal ions, significantly enhanced the affinity of Procion Red H-BBN and its analogs Procion Red MX-8B and Procion Red MX-2B, for I. Apparently, this effect is mediated through the formation of a specific tetracoordinate Zn complex between

the azo linkage and adjacent sulfonate and hydroxyl functions of the dye and an appropriate ligand on the protein. I quant. inactivated with the dichlorotriazinyl dye Procion Red MX-8B contained .apprx.1 mol dye/mol

reson. subunit of mol. wt. 42,000. Proteolytic cleavage of labeled I and

of the peptides by reverse-phase HPLC yielded a principal red peptide which, on amino acid sequence anal., resulted in the identification of

the dye-binding domain. Apparently, the affinity label Procion Red MX-8B is attached to the hydroxylic side chain of threonine-279.

IT 59-05-2

RL: BIOL (Biological study)  
(carboxypeptidase G-2 inactivation by Procion Red MX-8B protection by)

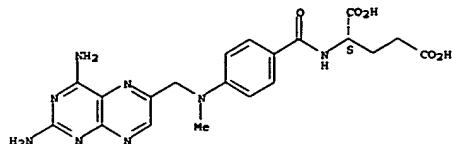
RN 59-05-2 CAPLUS

CN L-Glutamic acid,

N-[4-[[[2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 64 OF 71 CAPLUS COPYRIGHT 2002 ACS (Continued)



## L24 ANSWER 65 OF 71 USPATFULL

ACCESSION NUMBER: 82:31674 USPATFULL

TITLE: Process for preparation of folic acid derivatives Parina, Peter R., North Salem, NY, United States

INVENTOR(S): Grattan, James A., Croton-on-Hudson, NY, United States  
PATENT ASSIGNEE(S): Baker Instruments Corp., Wilton, CT, United States  
(U.S. corporation)

## NUMBER KIND DATE

PATENT INFORMATION: US 4337339 19820629

APPLICATION INFO.: US 1979-90059 19791031 (6)

RELATED APPLN. INFO.: Division of Ser. No. US 1979-34760, filed on 30 Apr 1979, now Defensive Publication No.

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Coughlan, Jr., Paul M.

LEGAL REPRESENTATIVE: Rauchfuss, Jr., George W.

NUMBER OF CLAIMS: 11

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 797

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Folic acid derivatives, such as radiolabeled pteroyltyrosine, are conveniently synthesized from either pteroxic acid or by the direct condensation of 6-formylpterin with p-aminobenzoyltyrosine methyl ester.

The radioiodinated derivatives are particularly useful in competitive protein binding and radioimmuno-assays of folate compounds.

IT 59-30-3P, radioactive iodine deriv.

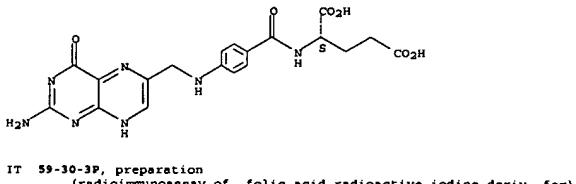
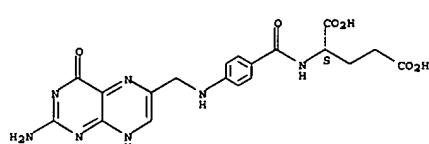
(prep. of for radioimmunoassay)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[[[2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## L24 ANSWER 65 OF 71 USPATFULL (Continued)

IT 59-30-3P, preparation  
(radioimmunoassay of, folic acid radioactive iodine deriv. for)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[[[2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L24 ANSWER 66 OF 71 USPATFULL  
 ACCESSION NUMBER: 82:19052 USPATFULL  
 TITLE: Process for preparation of folic acid derivatives  
 INVENTOR(S): Parina, Peter R., North Salem, NY, United States  
 Grattan, James A., Croton-on-Hudson both of, NY,  
 United States  
 PATENT ASSIGNEE(S): Baker Instruments Corporation, Bethlehem, PA, United States (U.S. corporation)

NUMBER	KIND	DATE

PATENT INFORMATION: US 4326060 19820420

APPLICATION INFO.: US 1979-90064 19791031 (6)

RELATED APPLN. INFO.: Division of Ser. No. US 1979-34760, filed on 30 Apr 1979, now Defensive Publication No.

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Rizzo, Nicholas S.

LEGAL REPRESENTATIVE: Rauchfuss, George W.

NUMBER OF CLAIMS: 8

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 789

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

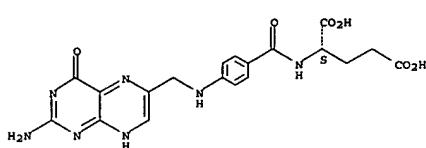
AB Folic acid derivatives, such as radiolabeled pteroyltyrosine, are conveniently synthesized from either pteroic acid or by the direct condensation of 6-formylpterin with p-aminobenzoyltyrosine methyl ester.

IT 59-30-3DP, radioactive iodine deriv.  
 (prepn. of, for radioimmunoassay)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

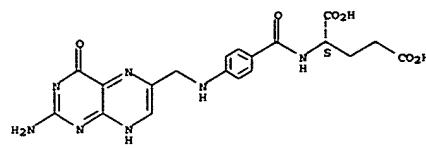


IT 59-30-3P, preparation  
 (radioimmunoassay of, folic acid radioactive iodine deriv. for)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

L24 ANSWER 66 OF 71 USPATFULL (Continued)  
 Absolute stereochemistry.



L24 ANSWER 67 OF 71 USPATFULL  
 ACCESSION NUMBER: 82:6924 USPATFULL  
 TITLE: Folic acid derivatives and process for preparation  
 INVENTOR(S): Parina, Peter R., North Salem, NY, United States  
 Grattan, James A., Croton-on-Hudson, NY, United States  
 PATENT ASSIGNEE(S): Baker Instruments Corp., Bethlehem, PA, United States (U.S. corporation)

NUMBER	KIND	DATE

PATENT INFORMATION: US 4314988 19820209

APPLICATION INFO.: US 1979-90063 19791031 (6)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Nucker, Christine M.

LEGAL REPRESENTATIVE: Rauchfuss, Jr., George W.

NUMBER OF CLAIMS: 4

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 804

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

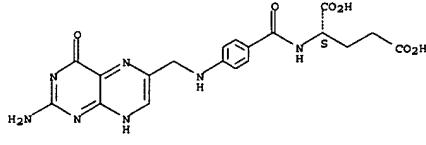
AB Folic acid derivatives, such as radiolabeled pteroyltyrosine, are conveniently synthesized from either pteroic acid or by the direct condensation of 6-formylpterin with p-aminobenzoyltyrosine methyl ester.

IT 59-30-3, analysis  
 (detn. of, by competitive protein binding assay)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

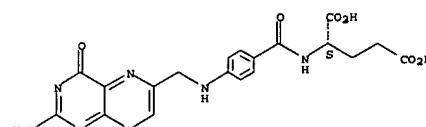


IT 59-30-3D, derive.  
 (detn. of, by competitive protein binding assay or radioimmunoassay)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

L24 ANSWER 67 OF 71 USPATFULL (Continued)



Absolute stereochemistry.

L24 ANSWER 68 OF 71 USPATFULL  
 ACCESSION NUMBER: 81:60373 USPATFULL  
 TITLE: Folic acid derivatives  
 INVENTOR(S): Farina, Peter R., North Salem, NY, United States  
 Grattan, James A., Croton-on-Hudson, NY, United States  
 PATENT ASSIGNEE(S): Union Carbide Corporation, New York, NY, United States  
 (U.S. corporation)

NUMBER KIND DATE  
 -----  
 PATENT INFORMATION: US 4298735 19811103  
 APPLICATION INFO.: US 1979-34760 19790430 (6)  
 DOCUMENT TYPE: Utility  
 FILE SEGMENT: Granted  
 PRIMARY EXAMINER: Coughlan, Jr., Paul M.  
 LEGAL REPRESENTATIVE: Evans, J. Hart  
 NUMBER OF CLAIMS: 16  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)  
 LINE COUNT: 801  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Folic acid derivatives, such as radiolabeled pteroyltyrosine, are conveniently synthesized from either pteroxic acid or by the direct condensation of 6-formylpterin with p-aminobenzoyltyrosine methyl ester.

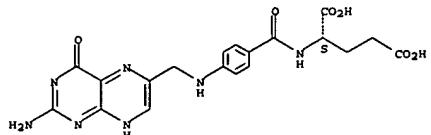
The radioiodinated derivatives are particularly useful in competitive protein binding and radioimmuno-assays of folate compounds.

IT 59-30-3DP, radioactive iodine deriv. (prep. of, for radioimmunoassay)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



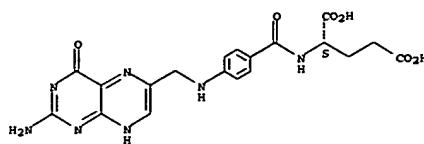
IT 59-30-3P, preparation (radioimmunoassay of, folic acid radioactive iodine deriv. for)

RN 59-30-3 USPATFULL

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

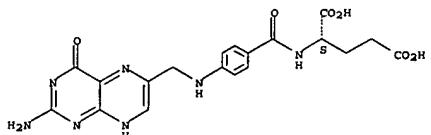
Absolute stereochemistry.

L24 ANSWER 68 OF 71 USPATFULL (Continued)



L24 ANSWER 69 OF 71 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1982:11734 CAPLUS  
 DOCUMENT NUMBER: 96:11734  
 TITLE: Rapid and specific high-pressure liquid chromatographic assay for folic acid in multivitamin-mineral pharmaceutical preparations  
 AUTHOR(S): Tafolla, W. H.; Sarapu, A. C.; Dukes, G. R.  
 CORPORATE SOURCE: Control Res. Dev. Lab., Upjohn Co., Kalamazoo, MI, 49001, USA  
 SOURCE: J. Pharm. Sci. (1981), 70(11), 1273-6  
 CODEN: JPMSAE; ISSN: 0022-3549  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A high-pressure liq. chromatog. assay for folic acid [59-30-3] in multivitamin-mineral pharmaceutical formulations was developed. The internal std. soln. used for sample extn. contained a chelating agent, pentetic acid, for prevention of metal ion-catalyzed degrdn. of folic acid in the prep'd. samples. Samples were chromatographed using a paired-ion mobile phase (H2O-MeOH .apprx. 76:24; 0.015 M phosphate buffer, pH 7.0; and 0.3M tetrabutylammonium hydroxide on a column packed with octadecylsilane bonded to microparticulate silica gel; a UV detector was used at 280 nm. Sample prepn. was rapid, and total chromatog. time was .apprx.30 min. The method was accurate, precise, and highly specific. Folic acid and the internal std., methylparaben, were sepd. from other tablet components and a no. of potential impurities and degrdn. products of folic acid.  
 IT 59-30-3, analysis  
 RL: ANT (Analytic); ANST (Analytical study)  
 (detn. of, in multivitamin-mineral pharmaceuticals by high-pressure liq. chromatog.)  
 RN 59-30-3 CAPLUS  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 70 OF 71 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1977:38400 CAPLUS

DOCUMENT NUMBER: 86:38400

TITLE: Potentiometric method for studying the complex formation of folic acid with nickel(II) and

cobalt(III)

AUTHOR(S): Mironov, E. A.; Nabokov, V. S.

CORPORATE SOURCE: I. Mosk. Med. Inst. im. Sechenova, Moscow, USSR

SOURCE: Khim.-Farm. Zh. (1976), 10(6), 136-40

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Potentiometric titrn. anal. showed that in folic acid [59-30-3] solns. Ni<sup>2+</sup> and Co<sup>2+</sup> form a stable bicyclic deprotonated chelate (I) with the coenzyme in addn. to the simple 1:1 and 1:2 (metal: ligand) complexes. Logarithms of the constns. for complex formation between folic acid and Ni<sup>2+</sup> or Co<sup>2+</sup> are presented. Possible

use of folic acid as a clin. chelating agent to decrease the toxicity of Ni<sup>2+</sup> and Co<sup>2+</sup> is discussed.

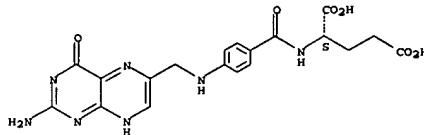
IT 59-30-3, reaction

RL: ROM (Reactant)  
 (complexation of, with cobalt and nickel, metal toxicity in relation to)

RN 59-30-3 CAPLUS

CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 71 OF 71 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1973:52827 CAPLUS  
 DOCUMENT NUMBER: 78:52827  
 TITLE: Effects of ethylenediaminetetraacetate and diethylenetriaminepentaacetate on DNA. Synthesis in kidney and intestinal mucosa of folate treated rats  
 AUTHOR(S): Taylor, David M.; Jones, Julie D.  
 CORPORATE SOURCE: Biophys. Div., Inst. Cancer Res., Belmont/Sutton/Surrey, Engl.  
 SOURCE: Biochem. Pharmacol. (1972), 21(24), 3313-15  
 CODEN: BCPCA6  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Folate stimulation of DNA synthesis in the rat kidney was markedly depressed by calcium disodium EDTA [62-33-9] and by calcium trisodium diethylenetriaminepentaacetate (CaNa3DTPA) [12111-24-9] and manganese trisodium diethylenetriaminepentaacetate [11065-74-0], but not by zinc disodium EDTA [14025-21-9] or zinc trisodium diethylenetriaminepentaacetate [11082-38-5]. In the intestinal mucosa, only CaNa3DTPA decreased folate-stimulated DNA synthesis. That the Zn salt had little effect on DNA synthesis in the kidney or intestinal mucosa suggested that they may be more suitable for prolonged administration for treatment of certain types of metal and radioelement poisoning in man than the Ca salts.  
 IT 59-30-3, biological studies  
 RL: BIOL (Biological study)  
 (DNA formation stimulation by, in kidney and intestine, chelating agents effect on)  
 RN 59-30-3 CAPLUS  
 CN L-Glutamic acid, N-[4-[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]aminobenzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

